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APPLICABILITY OF THE BUREAUCRATIC MODEL TO THE ORGANIZATIONAL
STRUCTURE OF THE SCHOOL.

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MARYLAND

THE STUDY OBJECTIVES WERE (1) TO EXAMINE THE DEVELOPMENT
AND FUNCTIONING OF RULES WITHIN THE SCHOOL, (2) TO DETERMINE
WHETHER CERTAIN LATENT BUREAUCRATIC CHARACTERISTICS EXIST IN
THE SCHOOL AND THEIR RELATION TO RULES, AND (3) TO DEVELOP
LIKERT SCALES, TO MEASURE CERTAIN STRUCTURAL CHARACTERISTICS
OF THE SCHOOL AND LATENT CHARACTERISTICS OF TEACHERS. A
QUESTIONNAIRE WAS DEVELOPED AND ADMINISTERED TO 152 JUNIOR
HIGH SCHOOL TEACHERS IN THE BALTIMORE CITY SCHOOLS TO OBTAIN
INFORMATION ABOUT TEACHERS' APPROACHES TO INSTRUCTION, THEIR
ATTITUDES TOWARD TEACHER UNIONS, NEW CURRICULUM, AND NEW
TEACHING TECHNIQUES, AND THEIR EXPERIENCE AND TENURE STATUS
IN THE SCHOOL SYSTEM. TWENTY-SIX DEPARTMENT HEADS, CHAIRMEN,
AND PRINCIPALS COMPLETED A QUESTIONNAIRE CONCERNING
INSTRUCTIONAL PROCEDURES AND RULES EXISTING IN DEPARTMENTS.
FINDINGS INCLUDED 39 SPECIFIC STATEMENTS GROUPED IN 9
CATEGORIES, SUCH AS "SOCIOECONOMIC LEVEL OF THE STUDENT
BODY," "BUREAUCRATICALLY DEFINED TEACHER COMPETENCE," AND
"AUTHORITY CONFLICT." (JM)

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APPLICABILITY OF THE BUREAUCRATIC MODEL TO
THE ORGANIZATIONAL STRUCTURE OF THE SCHOOL

Cooperative Research Project No. S-043

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Baltimore, Maryland

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PROBLEM

Within formal organizations, action is directed toward the accomplishment of common goals and proceeds in conformance with prescribed norms. Max Weber, in his treatment of the sociology of organizations, or as he calls them, "corporate organizations", conceives of the structure as being composed of roles or positions in which authority is institutionalized. Authority in this case becomes attached to particular offices within the organization, and not to the particular individuals occupying the positions. Thus, authority becomes institutionalized by rigid specification and articulation through rules, regulations, codes norms, standards, etc. "Orders" are given and must be carried out. This requires an administrative staff which takes the form of a "bureaucratic" structure in which, according to Weber, officials function under the following criteria:

1. They are personally free and subject to authority only with respect to their impersonal official obligations.
2. They are organized in a clearly defined hierarchy of offices.
3. Each office has a clearly defined sphere of competence in the legal sense.
4. The office is filled by a free contractual relationship. Thus, in principal, there is free selection.
5. Candidates are selected on the basis of technical qualifications. In the most rational case, this is tested by examination or guaranteed by diplomas certifying technical training, or both. They are appointed, not elected.

6. They are remunerated by fixed salaries in money, for the most part with a right to pensions. Only under certain circumstances does the employing authority, especially in private organizations, have a right to terminate the appointment, but the official is always free to resign. The salary scale is primarily graded according to rank in the hierarchy; but in addition to this criteria, the responsibility of the position and the requirements of the incumbent's social status may be taken into account.

7. The office is treated as the sole, or at least the primary, occupation of the incumbent.

8. It constitutes a career. There is a system of "promotion" according to seniority or to achievement, or both. Promotion is dependent on the judgment of superiors.

9. The official works entirely separated from ownership of the means of administration and without appropriation of his position.

10. He is subject to strict and systematic discipline and control in the conduct of the office.¹

Weber's notion of viewing organizations in terms of the internal differentiation of authority in clearly defined hierarchy of offices suggests that any analysis of organizations must be concerned with authority as manifested in rules at every level of the structure. An official is exercising authority which is vested in rules and is, himself, subject to authority which resides in rules. Rules become the bearer of authority for the organization, and it is through their functioning that an organization controls and directs the actions of its participants in the accomplishment of a common goal.

¹Max Weber, The Theory of Social and Economic Organization, trans. A. M. Henderson and Talcott Parsons (New York: Oxford University Press, 1947), pp. 333-334; Max Weber, From Max Weber: Essays in Sociology, trans. H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1946), pp. 196-204.

The present study is concerned with an application of the bureaucratic theory to the junior high school by examining the development and functioning of rules for teachers.

Initially, rules were considered under three categories: behavioral rules, which include all of the norms that pertain to the teacher's personal actions both inside and outside of the school; administrative rules, which are concerned with the teacher and his relationship to the school and to his superiors; and pedagogical rules, which define the teacher's relationship to students in instructional matters.

In order to limit the scope of the study, it was decided to restrict consideration to the last category of rules and not to attempt to examine all rules and norms circumscribing teacher behavior. Pedagogical rules were selected because, since they are directly related to the substantive activity of the school--teaching, they exercise the greatest direct influence over teachers. Since the critical factor in the school is the contact between teachers and students, the main control over the pursuit of goals that the administration has at its disposal is the enforcement of these rules over instructional matters.

The primary functions that rules serve are:

(1) directing subordinate efforts toward a sub-goal of the organization²

²This general notion is discussed under the heading of the "explicational" function of rules in Alvin W. Gouldner, Patterns of Industrial Bureaucracy (Glencoe, Ill.: Free Press, 1954), pp. 162-164.

- (2) controlling behavior from a distance³
- (3) impersonalizing relations between superiors and subordinates⁴
- (4) regulating the discretion allowed subordinates⁵
- (5) protecting organizational members from extra-organizational pressure
- (6) legitimating the use of punishment by superiors⁶
- (7) acting as a bargaining point between superiors and subordinates⁷
- (8) legitimating the authority of superiors
- (9) providing security for the members of the organization⁸

The use of the theory of bureaucracy to study the functioning of rules in the school would then suggest the following questions:

³For a discussion of what is termed the "remote control" function of rules see ibid, pp. 166-168, and Julian Franklin, "The Democratic Approach to Bureaucracy," Readings in Culture, Personality and Society (New York: Columbia College, n.d.), p.3.

⁴Gouldner discusses the mediating influence that rules have on the relationship between superiors and subordinates under what he terms the "screening" function of rules in op. cit., pp. 164-166.

⁵The idea of a discretion narrowing function for rules is suggested by Franklin, op. cit., p. 3.

⁶Gouldner, op. cit., p. 170.

⁷See Gouldner's discussion of the "leeway" function of rules in ibid, pp. 172-174.

⁸For example see Robert Dubin, "Upward Orientation toward Superiors," Human Relations in Administration (New York: Prentice-Hall, Inc., 1951), pp.272-273.

(1) Do rules develop in the school in order to perform the functions listed above?

(2) How is the growth of rules within the school related to teacher competence, teacher commitment, authority conflict, etc.?

(3) Is the growth of rules within a school related to the school size or the size of the department?

(4) Do rules differ from school to school within the same school district?

(5) Do rules differ from department to department within the same school?

However, in attempting to structure and impersonalize relationships so that individual personalities will have little effect on the accomplishment of organizational goals, the groundwork is laid for dysfunction within the organization. Many of these dysfunctional elements are a direct result of the attempt to delineate authority and responsibility inherent in individual offices through a body of rules, and to impersonalize relationships between members of the organization.

Furthermore, the carrying out of the functions of the office necessarily involves the individual whose needs, goals, and past experiences may not coincide with those of the organization. The degree to which the individual's goals coincide with the organization's goals will determine whether or not the member will reinforce the formal goals or abridge them. This deviation from the formal structure

of the organization tends to mitigate the formal organization as an effective determinant of behavior.⁹

Some of these averse effects are:

- (1) the impersonalizing of relationships between officials of the organization and the public that they serve¹⁰
- (2) the reinforcement of apathy on the part of organizational members¹¹
- (3) goal displacement--inversion of ends and means with resistance to innovation¹²

Again the use of the bureaucratic theory suggest the following questions:

- (1) Do these secondary bureaucratic characteristics exist in the school?
- (2) Does over reliance on rules in the school lead to the dysfunctional elements enumerated above?

⁹For an excellent discussion of this truncation of the formal organizational structure see Philip Selznick, "Foundations of the Theory of Organization," American Sociological Review, XIII (February, 1948), pp. 25-35.

¹⁰For a discussion of conflict caused by impersonalization with clients see Robert K. Merton, "Bureaucratic Structure and Personality," Social Forces, XVII (May, 1940), pp. 560-568.

¹¹For a good explanation of this effect of rules see Gouldner's discussion of the "apathy-preserving" function of rules, op.cit., pp. 174-180.

¹²For a definition and discussion of goal displacement see Merton, op. cit.

(3) Is there a conflict between the teacher's professional expectations of autonomy and self-responsibility and the expectations of a centralized bureaucratic structure for conformity and predictability?

(4) If a school's organizational structure is bureaucratic, does it necessarily impair the accomplishment of the primary goals of the school and interfere with its substantive activity--teaching?

The first objective of this study is to examine the development and functioning of rules within the school. This is to be done by first generating a series of hypotheses relating rules to a number of structural characteristics of the school. If, then, rules are considered as a dependent variable, their relation to a number of independent variables characteristic of the organizational structure may be tested empirically. The hypotheses to be tested are as follows:

(1) The degree of rules for teachers will vary inversely with teacher competence.

(2) The degree of rules for teachers will vary inversely with teacher commitment.

(3) The degree of rules will vary inversely with the stability of the authority relationship between teachers and administrators.

(4) The degree of rules for teachers will vary from department to department.

(5) The degree of rules for teachers will vary directly with the size of the school.

However, there is another way of viewing rules, this time as independent variables. Rules may be empirically related to dysfunctional characteristics of the school which are now considered as dependent

variables. Consequently, a second objective of this study is to determine whether certain latent bureaucratic characteristics exist in the school and their relation to rules.

The following hypotheses are to be tested:

- (1) The degree of impersonality between teachers and students will vary directly with the degree of rules for teachers.
- (2) The degree of teacher commitment will vary inversely with the degree of rules for teachers.
- (3) The degree of emphasis on means instead of ends (goal displacement) will vary directly with the degree of rules for teachers.

All of these hypotheses will be discussed in greater detail in the next section.

Finally, an objective of this study is to develop scales, using the Likert method, to measure certain structural characteristics of the school and latent characteristics of teachers. Scales are to be developed to measure the following characteristics:

- (1) the degree of rules for teachers
- (2) the degree of teacher commitment to the school and to the profession
- (3) the degree of authority conflict between teachers and administrators
- (4) the degree of emphasis on means (goal displacement) evidenced by teachers
- (5) the degree of impersonality in relations between teachers and students.

HYPOTHESES

In this study the teacher has been chosen to be the center of investigation. Teacher characteristics, attitudes, and procedures have been empirically related to the level of bureaucratic rules existing within the school. Also, several characteristics of the school have been related to rules.

Considering the functions that rules perform, it is possible to formulate a number of hypotheses concerning the development of bureaucratic rules within an organization.

If rules are considered as a dependent variable, they may be viewed as functionally related to a number of independent variables, such as, teacher competence, teacher commitment, authority conflict, extra-organizational influences, the nature of the organizational activity, and the size of the organization.

First, if an index of teacher competence is considered as an independent variable, it may be hypothesized that bureaucratic rules in schools will vary inversely with the perception of the teachers' competence. Where the competence of teachers is questioned, one would expect a more explicit statement of duties and obligations as the administration attempts to ensure actions consonant with the goals of the school. Also due to difficulties in directly supervising teachers' conduct and the lack of measures of performance, the administration would be expected to resort to the prescription

of rules and regulations. In this way the organization could control the behavior of the teachers from a distance and could narrow the amount of discretion allowed individuals in performing their tasks.

This same argument can be used in the case of motivation of subordinates. Consequently, it can be hypothesized that bureaucratic rules will vary inversely with the degree of perceived motivation on the part of the teachers.¹

A third hypothesis relating bureaucratic rules and authority arises out of the relationship between teachers and supervisors and principals. It is hypothesized that bureaucratic rules will vary inversely with the stability of the authority relationship between teachers and administrators.²

This relationship may be unstable for several reasons. First, the administrator may be uncertain as to his authority over teachers and may lack the technical competence to supervise teachers in matters pertaining to the subject that they teach. Also, since there are no reliable measures of performance, administrators must rely upon the judgment of another person who observes the teacher. On the part

¹For a study concerning the relevance of this hypothesis for a mining company see Gouldner, op. cit., p. 180.

²Gouldner suggests a hypothesis similar to this one where status distinctions of dubious legitimacy arise within a mining company. This may also be valid for the relationships between administrators and teachers in a school. (Ibid., p. 180). Also for discussions of authority conflict see Chandler Washburne, "The Teacher in the Authority System," Journal of Educational Sociology, XXX (May, 1957), pp. 390-394; and Howard S. Becker, "The Teacher in the Authority System of the Public School," Journal of Educational Sociology, XXVII (November, 1953), pp. 128-141.

of the teacher there may be the feeling that his professional judgment should be respected in matters of pedagogy. Consequently, where there is a divergence of orientation with the teacher oriented toward a professional outlook and the administrator oriented toward a bureaucratic outlook, one would expect more bureaucratic controls. Administrators may be forced to legitimate their authority to their subordinates and to justify their own performance to superiors.

Another hypothesis is that bureaucratic rules will vary directly with the likelihood of outside pressure and influence on organizational members. In the schools where parents, community groups, political pressure, etc., may be brought to bear upon teachers, it becomes imperative for the organization to impersonalize relations with persons outside of the organization. In this way the school can minimize the impact of such forces on individuals and can prevent the disruptive consequences that these uncontrolled influences might have on the functioning of the school. Especially in matters pertaining to discipline, control of student behavior, health and safety of students, etc., where the organization may be subjected to legal action, it becomes imperative that the organization protect its members by specifying acceptable courses of action.

This may also be true where there is disparity in socio-economic status between teachers and students. Since conflict arises between students and teachers who have different cultural backgrounds and expectations, it may be necessary to prescribe behavior for teachers and students in various situations which arise. This greater degree of behavioral specification may be necessitated, also, by the difficulty

in retaining competent teachers in a less desirable teaching situation.

A fourth hypothesis is that bureaucratic controls will vary directly with the routinizability of tasks.³ Those functions of teachers and certain subjects which are characterized as routine and repetitious are much more susceptible to regulation than those which are infrequent and which vary with the class and the teacher. Thus, it would be expected that certain of the teachers' functions would be subject to rules and prescription more so than other functions. However, it would be expected that attempts would be made to recognize common routinizable elements in even these other functions and to subject them as far as possible to prescription.

Fifth, it is hypothesized that bureaucratic controls will vary inversely with the specificity of goals of the organization.⁴ Here it would be expected that in those matters regarding the pursuit of goals which are not clearly defined, the administration will resort to the prescription of behavior through rules to a much greater extent in order to ensure subordinate action directed at the accomplishment of these goals. In the case of the teacher it would be expected that in those functions, such as character building or citizenship training where there is some uncertainty and indefiniteness about what the teacher is expected to accomplish, one would expect a more thorough delineation of procedures.

Finally, it is hypothesized that the larger the school in

³For a study of this hypothesis in industry see Richard H. Hall, "An Empirical Study of Bureaucratic Dimensions and their Relation to Other Organizational Characteristics," (unpublished Ph.D. dissertation, Ohio State University, 1961).

⁴Ibid.

terms of student enrollment and number of teachers, the more bureaucratic controls.⁵ This would appear to be the case due to the increased pupil-teacher ratio in these schools, as well as the increased problems of administration and supervision with the larger number of teachers involved. A cursory observation supports this hypothesis in that, whenever departments in the Baltimore City schools contain more than six teachers, a department head is appointed with extra supervisory duties. Up until this number is reached, a chairman is named for purposes of coordination but with no supervisory responsibilities.

As has been discussed before, in attempting to specify jurisdiction, to impersonalize relationships within the organization, to systematically direct the behavior of participants, and to impersonalize relationships with those persons outside of the organization, tendencies toward dysfunction are built into the organization. These deleterious factors require a continuing effort on the part of the organization to minimize their impact on the functioning of the organization in the pursuit of its goals.

Consequently, there is another way of viewing bureaucratic rules, this time as an independent variable. If we now try to relate rules to the dysfunctional characteristics of the organization as dependent variables, we can generate another series of hypotheses to be tested. Now impersonality, motivation, conflict, and goal displacement can be viewed as functionally related to a common independent variable, bureaucratic rules.

⁵Ibid.

The first of these hypotheses is that impersonality in relationships with students, parents, and other teachers will vary directly with bureaucratic rules. Here it is expected that this result will arise out of the emphasis placed on formalized relationships and procedures. As a result, teachers would be expected to treat students and parents in a formal, impersonal manner. Stereotypes and categories would be developed into which individual cases would be grouped. Dealing with them would be in terms of which of these groups the particular problem falls into. Comments on report cards, replies to questions from parents, discussion with students about their work would be standardized.

It has already been hypothesized that bureaucratic rules will vary with the perception of motivation on the part of the teachers. Now the opposite is hypothesized, namely, that motivation will vary inversely with bureaucratic rules. This might be expected from the previous discussion concerning some of the results of the rules.⁶ When behavior is carefully prescribed, the minimum acceptable performance is specified. Consequently, this tends to become the standard. Strict adherence to the prescribed procedures permits subordinates to participate in the organization without being committed to it. Thus, one would expect bureaucratic rules and lack of motivation to reinforce each other. That is, lack of commitment which, in turn, generates more rules.

⁶See Gouldner's discussion of the "apathy preserving" function of rules op. cit., pp. 174-180.

Furthermore, it is hypothesized that emphasis on means will vary directly with bureaucratic controls. Here we are concerned with the common phenomenon of goal displacement from ends to means. Rigid adherence to rules and conformance to prescribed patterns regardless of circumstances results from over regulation of teacher behavior. The primary goal of teaching the individual student becomes supplanted with the more immediate goal of conforming to procedures for classroom work, grading, lesson formats, etc. without regard for their applicability in individual cases and with little or no attempt to adapt these patterns of behavior as required by the situation.

One example is the attempt to teach a watered down version of the academic curriculum to a basic class of students with the same basic methods as used for academically oriented students. In this case, no attempt is made to approach the subject matter from a different standpoint with different teaching methods. Rather the prescribed procedure is rigidly adhered to even when its ineffectiveness is repeatedly demonstrated.

RELATED LITERATURE AND RESEARCH

In the broader body of organizational literature two traditions are relevant. Both stem from the translations of Max Weber's writings concerning what he termed "bureaucratic" organizations.¹ The first group, of whom Gouldner² and Marx³ are typical, have adopted their own ideal types to cover those cases which do not fit Weber's ideal bureaucratic model. Gouldner's punishment-centered bureaucracy and Marx's guardian bureaucracy, caste bureaucracy, patronage bureaucracy, and merit bureaucracy are good examples of extensions of the original theory.

A second group has centered its attention on the unanticipated consequences of purposeful action within organizations. Typical of this group are Merton⁴ and Selznick.⁵ Merton is concerned with the consequences which result when responses are generalized from situations

¹Max Weber, The Theory of Social and Economic Organization; Max Weber, From Max Weber: Essays in Sociology.

²Gouldner, op. cit.

³F. M. Marx, The Administrative State (Chicago: University of Chicago Press, 1957).

⁴Robert K. Merton, Social Theory and Social Structure (2d ed.; Glencoe, Ill.: Free Press, 1957); "Bureaucratic Structure and Personality," Social Forces, XVII (May, 1940), 560-568; "The Unanticipated Consequences of Purposive Social Action," American Sociological Review, I (December, 1936), 894-904.

⁵Philip Selznick, TVA and The Grass Roots (Berkeley: University of California Publications in Culture and Society, 1949), III; "An Approach to a Theory of Bureaucracy," American Sociological Review, VIII (February, 1943), 47-54; "Foundations of the Theory of Organization," American Sociological Review, XIII (February, 1948), 25-35.

in which they are appropriate to other inappropriate situations. Conflicts arise within the organization when primary personal relations are substituted for structurally required secondary impersonal relations. While on the other hand, conflict with the public arises out of the substitution of secondary impersonal relations for desired primary personal relations. Goal displacement, or the internalizing of rules and procedures, leads to impersonalized relationships with the public, the tendency to categorize and stereotype in making decisions, and legalism in defending decisions.

In his study of the TVA, Selznick studied the unanticipated consequences that arose when authority was delegated to sub-units of the organization. Delegation emphasized certain sub-goals of the organization to the exclusion of the overall goals. The resulting departmentalization led to interdepartmental conflict and attention to sub-goals and vested interests.

Similar analyses of dysfunctions within bureaucratic organizations have been carried out by Bendix,⁶ Blau,⁷ and Gouldner.⁸

Applications of the general bureaucratic theory have been confined almost exclusively to governmental agencies, military establishments, and industrial organizations. Good examples of its use in the analysis of governmental agencies are Selznick's study

⁶Reinhard Bendix, "Bureaucracy: the Problem and Its Setting," American Sociological Review, III (October, 1947), 493-507.

⁷Peter M. Blau, The Dynamics of Bureaucracy (Chicago: University of Chicago Press, 1955).

⁸Gouldner, op. cit.

of the TVA⁹ and Berger's study of the Civil Service in Egypt.¹⁰ Also, two brief studies have attempted to apply the model to the Navy. Both Davis¹¹ and Turner¹² have been concerned with lower ranking naval officers.

Probably the most successful attempts to apply the theory of bureaucracy to industrial organizations have been accomplished by Gouldner¹³ and Udy.¹⁴ Gouldner studied the growth of bureaucracy in a gypsum factory. By examining the social processes that led to different degrees of bureaucracy in two different divisions of the company, he generalized his findings to postulate factors that lead to bureaucracy in most industrial environments. Also, his study contains the only major discussion of the growth and functioning of rules within an organization. One chapter attempts to identify the institutional factors that are instrumental in the development of rules and their effect on employees.

⁹Selznick, op. cit.

¹⁰Morroe Berger, Bureaucracy and Society in Modern Egypt (Princeton: Princeton University Press, 1957).

¹¹Arthur K. Davis, "Bureaucratic Patterns in the Navy Officer Corps," Social Forces, XXVII (December, 1948), 143-153.

¹²Ralph H. Turner, "The Navy Disbursing Officer as a Bureaucrat," American Sociological Review, XII (June, 1947), 342-348.

¹³Gouldner, op. cit.

¹⁴Stanley H. Udy, Jr., "Bureaucratic Elements in Organizations: Some Research Findings," American Sociological Review, XXIII (August, 1958), 415-418; "Bureaucracy and Rationality in Weber's Organizational Theory: An Empirical Study," American Sociological Review, XXIV (December, 1959), 791-795; "Technical and Institutional Factors in Production Organization: A Preliminary Model," with comment by Arthur L. Stinchcombe, American Journal of Sociology, LXVII (November, 1961), 247-260; "Administrative Rationality, Social Setting, and Organizational Development," American Journal of Sociology, LXVIII (November, 1962), 299-308.

Udy, on the other hand, has attempted in a series of articles to reformulate Weber's bureaucratic characteristics so that they may be empirically tested. In examining the degree of rationality, defined as purposeful direction toward explicit objectives, of an industrial organization, he has shown how reformulating seven of Weber's characteristics leads to a Guttman scale by which organizations can be compared.

Studies of the teacher in the administrative structure of the school have been mostly concerned with role theory. Two good examples are the studies of Brookover¹⁵ and Gordon,¹⁶ which concerned the teacher's role in the school.

Chandler Washburne discusses the conflict between professional autonomy and bureaucratic authority.¹⁷ He perceives two sources of conflicting authority for the teacher. One source of authority is embodied in a set of professional norms and standards as defined by professional schools. The other is that of the rules and procedures of the bureaucratic organization. As a result, the teacher is confused about the ultimate source of authority and his role definition. When the teacher's professional role expectations are not supported, he abandons them for a more bureaucratic orientation that will be rewarded by the organization.

¹⁵Wilbur B. Brookover, A Sociology of Education (New York: American Book Company, 1955); (ed.) "Teacher and Administrator Roles in the Educative Process," Journal of Educational Sociology, XXIX (September, 1955), 1-48.

¹⁶C. Wayne Gordon, "The Role of the Teacher in the Social Structure of the High School," Journal of Educational Sociology, XXIX (September, 1955), 21-29.

¹⁷Washburne, op.cit., 390-394.

Howard S. Becker has also attempted to examine the teacher's position in the hierarchy of authority within the school.¹⁸ He is concerned essentially with the effect of parents, who are relatively uncontrollable, on the school. Teachers who fear a direct challenge to their authority from parents look to the principal for support and to their colleagues for cooperation.

The most recent review of the literature on the organizational structure of the school is by Charles E. Bidwell and will be included as a chapter in James G. March's forthcoming book on organizational theory.¹⁹ In his survey he discusses the research on the school as a small society and as a bureaucracy. Much has been written about the authority of the board of education, the superintendent, and the principal, but few studies have been concerned with the teacher and his position in the authority structure of the school.

¹⁸Becker, op. cit., 128-141.

¹⁹Charles E. Bidwell, "The School as a Formal Organization," in James G. March, (ed.), Handbook of Administration and Organization Theory (Chicago: Rand McNally, in press).

SURVEY DESIGN, SAMPLING, AND SCALING

Survey Design

The overall design of this experiment is similar to that used by Richard H. Hall in his doctoral dissertation,¹ in which he developed scales to measure the following bureaucratic dimensions: hierarchy of authority, division of labor, rules, procedures, impersonality, and technical qualifications. These scales were then administered to a sample of industrial organizations in order to examine variation along each dimension and to relate the bureaucratic dimensions to other organizational characteristics, such as, size and specificity of goals.

In the present study the functioning of rules is examined in the junior high school. This chapter deals with the design of the survey, the sampling technique, and the method used to scale the variables under consideration.

Variables

Before measuring instruments for each of the variables could be developed, it was necessary, first, to construct operational definitions for the characteristics. Using these definitions, observable indicators could be specified from which the existence of the characteristics might

¹Hall, op. cit., also briefly described in an article entitled "Intraorganizational Structural Variation: Application of the Bureaucratic Model," Administrative Science Quarterly, VII (December, 1962), 295-308.

be inferred.² These indicators were subsequently built into a questionnaire.

In the following sections the operational definition adopted for each variable under consideration will be discussed in turn.

Rules

Rules guiding and restricting teachers were considered under three categories. First, behavioral rules include all of the norms that pertain to the teacher's personal actions both inside and outside of the school. Examples of these include proper attire, activities outside of the school, smoking in the school, maternity leave policies, and discussion of school policies. Second, administrative rules are concerned with the teacher and his relationship to the school and to his superiors. These include all of the rules related to arrival and departure times, personal telephone calls during the school day, deadlines for reporting grades, extra duties, handling of student absences and late arrivals, student discipline, attendance at faculty meetings, and extra-curricular assignments. Third, pedagogical rules define the teacher's relationship to students in instructional matters. Norms in this category include teaching methods, lesson plan preparation, discussion of controversial topics in class, selection of textbooks, academic preparation required for teaching, grading standards, home assignments for students, curriculum selection, supervision of instruction, and testing of students.

²For a discussion of indices in survey analysis see Paul F. Lazarsfeld and Allen H. Barton, "Qualitative Measurement in the Social Sciences: Classification, Typologies, and Indices," in Daniel Lerner and Harold D. Lasswell (eds.), The Policy Sciences (Stanford: Stanford University Press, 1951), pp. 155-192.

It was decided to restrict the study to the latter category of rules and not to attempt to examine all of the rules and norms circumscribing teachers' behavior. Pedagogical rules were selected because, since they are directly related to the substantive activity of the school-teaching, they exercise the greatest direct influence over teaching. Since the critical factor in the school is the contact between teachers and students, the main control over the pursuit of goals that the administration has at its disposal is the enforcement of these rules over instructional matters.

After pretesting a number of questions pertaining to rules affecting teaching and instruction, eight areas were decided upon to be used in measuring the degree of control exercised over teachers.

These areas are:

- (1) lesson plan preparation
- (2) textbook selection
- (3) curriculum selection
- (4) discussion of controversial topics
- (5) grading of students
- (6) home assignments for students
- (7) supervision of instruction
- (8) testing of students

In each area a multiple choice question was constructed with possible responses ranging from complete autonomy to rigid prescription. This format made it possible to rate the degree of control exercised in each area on a five point scale.

Bureaucratically Defined Teacher Competence

No attempt has been made to measure competence directly due to the lack of agreement as to what constitutes good teaching, and the lack of success in measuring it. However, the Baltimore Public Schools rate teachers on the basis of experience and academic and professional preparation. Full time instructional personnel are placed into one of three categories. First, elected teachers have taught for at least two years in Baltimore City, hold a current teaching certificate, and have completed the prescribed academic requirements. They are considered as having demonstrated professional competence and they have tenure. Second, non-elected teachers have taught in the City for less than two years, hold a current teaching certificate, and have completed the prescribed academic work. Although they have completed their professional preparation, the Baltimore Public Schools consider them as probationary teachers for a two year period. During this time they must attend a meeting monthly, and are regularly observed in the classroom by subject matter specialists. Third, special substitute teachers lack either the certification requirements or the academic requirements. In some cases they lack both; however, many of these teachers hold a bachelors degree from an accredited institution but lack the necessary professional courses required by the State for certification. They are hired to teach in subject matter areas where fully qualified teachers are lacking with the understanding that they will complete all of the requirements for election (tenure) within two years.

For purposes of this study, these three categories have been used as levels of bureaucratic competence as defined by the Baltimore City Board of Education. Since the school system classifies teachers according to this scheme, without regard to other factors, such as, age, amount of academic preparation beyond the bachelors degree, work experience, and other factors, it is evident that by using their standards for classification, the index of competence will conform to their definition.

Bureaucratically Perceived Teacher Commitment

Commitment, as used here, refers to the degree to which the teacher identifies with the teaching profession and the school to which he is assigned. Although this is a latent characteristic, certain manifest indicators may be taken by the administration as reflections of the degree of commitment and involvement of the teacher in the school enterprise.

For instance, the number of years that a teacher has taught is an indicator of whether or not he plans to make a career of teaching. Also, there are other indicators, such as academic preparation. A person who continues to update his knowledge of the field that he teaches can be reasonably considered to be more committed to the profession than one who does not. A third good indicator is professional activity. The degree of involvement of a teacher in officially approved professional associations is an index of commitment. This may include holding offices, attendance at meetings and conventions, presentation of papers, and participation on committees.

On the other hand, the teacher's commitment to the school leads

to behavior which may be taken as indicative of his degree of involvement. One example is the number of years that a teacher has been at the school which is an indication of his attachment to that school. Since teachers in Baltimore City may apply for transfer to other schools and may request an extension of their assignment to their present school, length of service at a particular school is a good index of commitment to that school. Also, the frequency of attendance at extracurricular functions, exclusive of coaching and advising assignments, is an indicator, since voluntary attendance at school functions reflects the attitude of the teacher toward the school.

The final index of commitment which was adopted, however, is a function of only two of these factors - total teaching experience and length of service in a particular school.

Authority Conflict

Authority conflict is defined as the tension that a person feels due to the imposition of two or more contradictory sources of authority. If the teacher has conflicting allegiances to more than one authority, his relationship with administrative officials may be unstable or unacceptable to one or both members. Consequently, uncertainty arises as to the ultimate source of authority. For the teacher, one cause of this conflict may be due to his orientation which differs from that of the administrator. Teachers, on the whole, may be oriented toward their profession--teaching, and the more immediate problems of the classroom. Administrators may be oriented toward the school as an organization and may be more sensitive to outside forces. Consequently, conflicts may arise between two sources of authority over

instructional matters--professional autonomy, or internalized norms established through professional training, and bureaucratic authority, or centralized control through a hierarchy of authority.

If such a conflict does exist, it should manifest itself in some of the following attitudes and behavior on the part of teachers: dissatisfaction with administrative policies, such as, class assignments for teachers, faculty facilities, administrative support for teachers, etc.; dissatisfaction with instructional supervision; increased interest in teacher unions, collective bargaining, grievance systems; higher incidence of disagreements with administrators and supervisors.

Impersonality

Impersonality is defined as formality in relationships between teachers and students which results in treating all students as if they belong to a common class without regard for individual differences.³ Personal relations are minimized and abstract rules and procedures are developed for universal application. Individuals are classified into categories and are treated alike without regard for differences.

One index of this attitude is the degree to which a teacher attempts to allow for individual differences among students. This may be determined by examining the procedures that he follows in assigning homework and projects, his use of textbooks and outside reading assignments, the factors that he considers in grading students, and the approach that he uses in testing students.

³This definition of impersonality is similar to the one proposed by Merton, "Bureaucratic Structure and Personality," Social Forces, pp. 560-568.

Another index of impersonality is the extent to which the teacher attempts to assist individual students. Conferences with students who need assistance with academic work, or who request advice on personal matters, informal notification of parents whose son or daughter is experiencing difficulty, and assistance to individual students with projects or contests are all indications of the teacher's personal involvement with individual students. The absence of personal assistance to students is considered as demonstrative of a formal, impersonal attitude on the part of the teacher.

Goal Displacement

Goal displacement is defined as the transference of attention from the primary goals of the organization to the prescribed means of attaining those goals.⁴ Attention becomes focused on detailed behavior required by the organization's policies and procedures resulting in a means-ends inversion with instrumental values becoming terminal values. Rigid adherence to rules and acceptance of the status quo results in an increased reluctance to consider new methods as demanded by changing conditions both inside and outside of the organization.

This attitude is manifested in rigid stereotyped behavior which may be taken as an index of goal displacement. The area in which the manifestation of this attitude is to be examined is in instructional matters. Here we may examine the flexibility of the teacher in adapting his approach to various classes and various topics of instruction. Rigid adherence to a particular lesson format, and over dependence on the same teaching techniques will be considered as indicative

⁴This definition of goal displacement is taken from ibid.

of goal displacement.

Also, attitudes toward proposed changes in curriculum and teaching methods offer a second approach. Resistance to the consideration of and adoption of new programs and techniques will be considered as another index of goal displacement.

Size

Two of the variables in this study are related to the size of the school. They are the size of the student enrollment in the school, and the number of faculty members assigned to a department.

Within Baltimore's junior high schools, enrollments range from 57 to 2,570 students. Appendix III contains a complete list of the 38 schools with their student enrollments.

Subject matter is divided into thirteen departments; however, only the larger schools contain all of them. Within these departments the number of faculty members may vary from one to nineteen.

Questionnaire Design

It was decided to use a questionnaire to obtain the data for this study. Reliance was placed upon written responses to predesigned questions. This approach was adopted because of its several advantages.⁵ First, the cost of collecting data in this fashion is low. It is not necessary to train people extensively to administer the questionnaire, for relatively little experience is needed. Second, data can be

⁵For good discussions of the use of questionnaires for collecting data see: Arthur Kornhauser, "Constructing Questionnaires and Interview Schedules" in Marie Jahoda, Morton Deutsch, and Stuart W. Cook, Research Methods in Social Relations, Part Two: Selected Techniques (New York: Dryden Press, 1951), pp. 423-462; and Mildred B. Parten, Surveys, Polls, and Samples (New York: Harper & Bros., 1950), pp. 157-218.

collected rapidly by administering the questionnaire to large groups of people at one time. Third, instructions, questions, and answers can be standardized, ensuring uniformity in measurement. Also, the influence of the person administering the questionnaire can be minimized. Fourth, replies to questions are deliberate and more accurate when the respondent is permitted to think about each question.

A draft questionnaire was constructed to include measures of the following variables:

- (1) school size
- (2) class size
- (3) teacher competence
- (4) teacher commitment
- (5) authority conflict
- (6) degree of supervision
- (7) degree of extra-organizational pressure
- (8) impersonality in teacher-student relations
- (9) goal displacement
- (10) responsibility avoidance
- (11) legalism
- (12) degree of rules
- (13) degree of extra-organizational dependence

For each of these variables an operational definition was constructed and a number of manifest indicators were postulated that would reflect the degree to which each variable was present in the school, or individual. Questions were then written for each indicator.⁶

⁶Kornhauser, *ibid.*; and Parten, *ibid.*, pp. 200-213 contain good discussions of the general rules to follow in writing questions.

The draft questionnaire was pretested on a sample of school teachers from Baltimore City and County. After analyzing their responses and the difficulties that they encountered in filling out the draft questionnaire, it was rewritten in its final form. Variables to be considered were reduced to the following:

- (1) school size in terms of student enrollment
- (2) department size in terms of number of faculty members
- (3) bureaucratically defined teacher competence
- (4) bureaucratically perceived teacher commitment to the profession and to the school
- (5) authority conflict between teachers and the administration
- (6) impersonality in teacher-student relations
- (7) goal displacement evidenced by teachers
- (8) degree of rules within the department

On the final questionnaire, questions were designed so that distinctions of degree could be made for each variable. The responses provided for each question were constructed so that the sum or average of the scores of an individual on a set of items would place him on a scale. His scale position would then indicate his order with respect to individual items and his composite score to a set of items resulting from combining item scores for a particular attitude may be of interest in the analysis.⁷

Final items that compose a particular scale are selected on the basis of two considerations.⁸ First, the item must be directly related

⁷This technique is that of summated ratings as developed by Rensis Likert and will be discussed under Scaling.

⁸Jahoda, op. cit., pp. 186-187.

to the attitude being examined. Second, the item must discriminate sufficiently between persons who fall at different points on the scale, representing different degrees of the attitude.

Consequently, multiple choice questions were used with three and five point rating scales. This form of response had several additional advantages. First, the time required to complete the questionnaire was greatly reduced by allowing teachers to circle the number of the most applicable responses. Second, the data was precoded for transfer to IBM cards. Third, the questions were designed so that they could be scaled using the Likert technique.

The final questionnaire was composed of two parts. The first part, which included background information, attitudes, opinions, and procedures, was completed by the teacher. Data contained in the second part of the questionnaire, departmental procedures, was obtained from heads of departments in each school.

Sampling

The sampling method used in this survey is that of proportional stratified sampling.⁹ This design was adopted for the following reasons:

(1) The strata chosen, namely, schools, departments, and teachers, form sub-populations which can be examined for variation along each of the dimensions under consideration.

⁹For good discussions of stratified sampling see William G. Cochran, "Stratified Random Sampling," Sampling Techniques (New York: John Wiley & Sons, 1953), pp. 65-110; Philip J. McCarthy, "Sample Design" in Jahoda, op. cit., pp. 644-680; Robert G. D. Steel and James H. Torrie, Principles and Procedures of Statistics (New York: McGraw Hill, 1960), pp. 412-426; and Parten, op. cit., pp. 219-245.

(2) Schools and departments are natural administrative units within the school district.

(3) Choice of sample size and collection of data has been handled differently for each of the three stratum.

(4) The size of the total sample was reduced by choosing strata that were as homogeneous as possible. Thus, more precise estimates of characteristics could be made for the total population using a smaller sample, since variation within stratum was reduced, and the variability between strata is eliminated from the final estimate for the population.

(5) Drawing a sample by proportional stratified sampling insures proper representation of the main attributes in the sample in the same proportion as in the population. If drawn correctly, it will closely resemble a random sample.

(6) It is the most efficient method for insuring proper representation in the sample.

In considering the sample size for each stratum, the following factors are considered:¹⁰

- (1) the size of the stratum
- (2) variation within the stratum
- (3) the cost of sampling within the stratum.

Stratum I - Junior High Schools

Within Baltimore City there are 38 junior high schools with student enrollments ranging from 57 to 2,570.¹¹ However, eight of these schools enroll only mentally retarded children. Consequently, these

¹⁰Cochran, op. cit., p. 75.

¹¹See Appendix III for a complete list of these junior high schools.

eight schools were eliminated from the population to be sampled because it was felt that they are atypical in the sense that teachers are specially trained and selected, curriculum and teaching methods are carefully designed, and all of these schools enroll less than 500 students. Parts of the questionnaire designed to indicate rigidity in teaching methods and formality in dealing with students would not be applicable to a school where definite procedures may be the most effective way of working with handicapped students. Also, a sample drawn from a population including these schools would be atypical of the junior high schools in Baltimore, and would include a disproportionate number of small specialized schools.

From this stratum, a sample of ten junior high schools was drawn. This sample size was chosen for two reasons. First, in order to use the χ^2 tables for Friedman's two way analysis of variance by ranks, a minimum of ten rows is necessary.¹² When the number of rows falls below this value, it is necessary to use special tables for a distribution which Friedman calls χ_r^2 . Second, since three departments were to be tested in each school, it was desirable to have at least a sample of thirty departments or ten in each subject area so that subclassifications could be made by department.

Substrata - Student Enrollment and Socioeconomic Level

In order to ensure a sample with the same distribution of school sizes and socioeconomic characteristics as the population, before sampling, the junior high schools were substratified according to these

¹²Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw Hill, 1956), p. 168.

two dimensions. Socioeconomic level for each school was determined by personnel in the Office of Research of the Baltimore Public Schools. The classification of each school is given in Appendix III. The breakdown of the population by student enrollment and by socioeconomic level is given in Table 1.

TABLE 1

Distribution of Junior High Schools in Baltimore City
by Student Enrollment and Socioeconomic Level

Socio- economic Level	Student Enrollment			Total
	Below 500 Students	500 to 1500 Students	Over 1500 Students	
Lower-lower Class	6	4	1	11
Upper-lower Class	1	4	7	12
Middle Class		3	4	7
Total	7	11	12	30

TABLE 2

Distribution of Junior High Schools in Baltimore City
Sampled by Student Enrollment and
Socioeconomic Level

Socio- economic Level	Student Enrollment			Total
	Below 500 Students	500 to 1500 Students	Over 1500 Students	
Lower-lower Class	3	1		4
Upper-lower Class		1	3	4
Middle Class		1	1	2
Total	3	3	4	10

After substratifying according to size and socioeconomic level, it was necessary to allocate sampling fractions to the various substrata. This was done proportionally, based on the number of schools in each subcategory. For example, for substrata--500 to 1500 students--lower-lower class--the sampling fraction was $4/30$. The sample size for this substratum was $4/30 \times 10 = 1$. Table 2 above shows the allocation of schools sampled by substrata.

Stratum II - Departments

Within the junior high schools in Baltimore, subject matter is divided into thirteen departments. These are: Art, Business Education, English, Foreign Languages, History-Geography, Home Economics, Industrial Arts and Engineering, Mathematics, Music, Physical Education, Science, Special Education, and Vocational Education.

For purposes of this study, it was decided to limit the sample to three departments that differ widely in the type of subject matter taught. In this manner, the relationship between rules and subject matter could be explored. Also, the relationship between subject matter and the latent characteristics, such as, commitment, authority conflict, impersonality, and goal displacement could be examined.

The three departments selected were English, Science, and Industrial Arts and Engineering. The department head or chairman within each department in the schools sampled was interviewed and asked to complete a questionnaire entitled "Departmental Procedures". This questionnaire consisted of two parts. First, it contained questions concerning instructional procedures from which a Likert Scale on degree of rules was to be constructed. Second, it required the rating

of each teacher within the department on each of the other scales that were to be developed, namely, commitment, impersonality, goal displacement, and authority conflict. These ratings were to be used to determine the validity of the scales that were constructed from the teachers' questionnaires.

Stratum III - Teachers

In order to obtain a sample of approximately 150 to 200 teachers, it was necessary to include every teacher from the three departments in the schools that were chosen for this study. This sample would then represent the entire population of English, Industrial Arts, and Science teachers in the Baltimore City Public Schools. Also, it was necessary, initially, to allow for teachers who failed to complete and return the questionnaire. This precaution, however, proved to be unnecessary, since only nine out of 161 teachers did not return the questionnaire. This represents a 94 per cent return. The total sample of teachers drawn was 152.

Scaling

Scale Construction

In measuring one dimensional attributes, procedures are developed so that numbers may be assigned to an attribute in such a manner as to reflect the relationship between different quantities of the attribute. If the attribute can be considered as being unidimensional and continuous, a geometric analogy may be used where points along a straight line represent different amounts of the attribute being measured. The location of these points may only indicate a rough ordering in terms of quantity; the intervals between points may reflect relationships

between different quantities of the attribute; or the distance of the points from a natural origin may have significance. These correspond to ordinal, interval, and ratio scales, respectively.¹³

For purposes of this study, the model to be used is that of summated ratings as developed by Likert and Murphy.¹⁴ Each attribute or variable under consideration is assumed to be unidimensional.

The model consists of an attitude scale made up of a series of items to which a person responds with some degree of agreement. An individual is given a score which is the sum of his scores on all of the items. Theoretically, the likelihood that a person will respond to each item in a certain manner is dependent upon his attitude. Consequently, a person manifesting the attitude to a high degree will respond favorably to most of the items; conversely, a person not manifesting the attitude will respond unfavorably to most of the same items on the scale. In effect, then, this method identifies those persons at both ends (high and low) of the attitude continuum.

A difficulty arises, however, in interpreting scale scores that fall in between the extremes. Since many different patterns of responses are possible, several persons may be assigned the same total composite score, yet differ widely on agreement or disagreement with particular items. For example, one person may respond to choice

¹³Warren S. Torgerson, Theory and Methods of Scaling (New York: John Wiley & Sons, 1958), pp. 37-38.

¹⁴Rensis Likert, "A Technique for the Measurement of Attitudes," Archives of Psychology, No. 140 (June, 1932); Gardner Murphy and Rensis Likert, Public Opinion and the Individual (New York: Harper & Bros., 1938) discusses the development and administration of a number of attitude scales using the Likert technique.

number 3 on each of three items, while another person responds to choices number 1, 3, and 5, respectively. Both have the same total score of nine, or average score of three. Consequently, the pattern of responses may be more interesting and meaningful than the total score. Nevertheless, the Likert technique does permit an ordering of individuals on the basis of the attitude that is measured. The scale thus formed is ordinal and not interval, and does not impart meaning to the distance between scale scores (the difference between 1 and 3 is not the same as the difference between 3 and 5).¹⁵

The development of the scales involved the following steps:¹⁶

First, operational definitions were developed for each of the following variables: professional commitment, authority conflict, impersonality, goal displacement, and rules. For each of these variables a number of items were developed which were seemingly related to the underlying attribute. Since it was necessary to discard some of the items after they had been administered to a representative group, more items than were deemed necessary were initially included.

Second, a first draft of the questionnaire was pretested on a sample of teachers from the Baltimore City and County schools. (See Appendix I). From the results obtained, the questions were edited

¹⁵A good brief discussion of the rationale behind the Likert scaling technique is contained in Marie Jahoda, Morton Deutsch, and Stuart W. Cook, Research Methods in Social Relations, (Part One: Basic Processes (New York: Dryden Press, 1951), pp. 185-198. Also Allen L. Edwards, Techniques of Attitude Scale Construction (New York: Appleton-Century-Crofts, 1957), pp. 158-159.

¹⁶For a general enumeration of the steps to follow in developing a scale see Jahoda, Part One, op. cit., pp. 195-196.

and rewritten to eliminate ambiguity and to increase specificity. Also, items, which upon inspection of the results, did not discriminate among subjects were eliminated. The entire questionnaire was then rewritten. (See Appendix II).

Third, the revised questionnaire was administered to the sample of teachers drawn from the junior high schools in Baltimore City. Afterward, the items included on the scale must be analyzed for their differentiability. It is important that discriminating items be selected for each attribute since the ability of the scale to distinguish between different amounts of the attribute depends upon it. In order to ensure internal consistency for each scale, each item on the scale was correlated with each of the other items on the scale and with the total score. If all of the items measure to some extent the underlying variable, then they should correlate with each other, and should correlate with the total. Any item that did not correlate highly with the other items and with the total was dropped because it did not measure the same attribute as the other items. From those items that remained after the item analysis was completed, new scales were constructed for each of the attributes. A table of the correlation coefficients for each item on each scale is given in Appendix IV. An examination of each of these tables indicates which items form a cluster measuring the same attribute and which items are seemingly unrelated to the attribute under consideration. The revised scales for commitment, authority conflict, impersonality, goal displacement, and rules are given in Appendix V.

Fourth, for each individual a score was computed on each of the scales. This was done by weighting the responses to each item and summing over all of the items on the scale.

TABLE 3

Scale and Index Construction

Questions	Responses				
	(1)	(2)	(3)	(4)	(5)
1				X	
2					X
3					X
4				X	
5					X
Underlying 5 Dimension Low				23 Respondent's High position on Index	25

Reliability

The reliability of a measurement is the consistency with which it measures stable values for individuals, and is free from random error when a series of measurements are made.¹⁷ In order to evaluate reliability, a determination must be made of the consistency of repeated measurements for the same individuals; however, in practice, usually only two measures of the characteristic are used. The degree of agreement between these two measures is the reliability of the measuring instrument.

One commonly used procedure for determining the reliability of a test is the split-half method.¹⁸ For each individual, test items are

¹⁷The following discussion of reliability is taken from Jahoda, Part One, *op. cit.*, pp. 100-107.

¹⁸For a good discussion of the split-half method for determining reliability, see *ibid.*, pp. 126-142.

divided into two groups and the scores on the two halves are correlated. The degree of correlation between the two halves of the test is a measure of reliability. Since the reliability coefficient is for a test one-half the length of the original one, the true reliability for the entire test must be computed.

This method of estimating reliability has the advantage of eliminating several sources of variation that occur when two different tests are given, or the same test is administered a second time to a group of individuals. Practice and memory effects are eliminated as well as fluctuations in attitudes, skills, and the characteristic being measured.

Basically, this method evaluates the internal consistency of the test by examining whether the items all measure the same characteristic. Since the choice of items represents only a sample from the total population of items related to the variable to be measured, some variation is to be expected. However, it is necessary to ensure that all items tap the same characteristic.

The reliability coefficients for the half tests and for the total scales are given in the table below.

TABLE 4
Reliability Coefficients

	Teacher Commitment Index	Authority Conflict Scale	Impersonality Scale	Goal Displacement Scale	Rules Scale
Reliability Coefficient for the Half Scale	0.838	0.501	0.227	0.327	0.120
Reliability Coefficient for the Total Scale	0.912	0.667	0.371	0.493	0.220

The low reliability of the Impersonality, Goal Displacement, and Rules scales is probably an indication of the weakness of the unidimensional assumption. Rather, they are probably multidimensional attributes with different scale items varying independently of one another. For example, there is some evidence that all of the rules included on the scale do not vary concurrently. It is evident from the low item to item correlations in the appendix and from examination of the questionnaires that one department may score high on certain rules and low on others, while other departments may indicate exactly the opposite emphasis. Certain rules may be initiated by the Principal, department head, or subject matter specialists. Which rules are emphasized, then, becomes a function of the personalities of these individuals as well as the experience of the teachers in the department. Nevertheless, the rules scale, as well as the others, may still be used as an overall index and departments and teachers may be ordered on this basis.

Validity

Validity is defined as the degree to which a measurement measures what it is intended to measure.¹⁹ It is important to know whether the data provided are really related to the characteristic being considered and whether differences in measures obtained for individuals and groups reflect true differences in the characteristic. To the degree that the measuring instrument is invalid, differences detected among individuals and groups may be attributed to other characteristics than the one being measured, or to errors in the measuring instrument itself.

¹⁹The following discussion of validity is taken from Jahoda, Part One, *op. cit.*, pp. 108-117; also see Cronbach, *op. cit.*, pp. 96-125; and Herbert Hyman, *Survey Design and Analysis* (Glencoe, Ill.: Free Press, 1955), pp. 163-172.

All of the methods for determining empirical validity of the measuring technique rely on a second independent behavioral criterion of the characteristic being measured.²⁰ This second measure must itself be valid and reliable.

Initially, scores on the scales were to be compared to the judgment of Department Heads who are in a position to provide information for comparison with the results obtained from the questionnaire. Department Heads were asked to rank teachers in their departments on the basis of each of the variables for which scales were constructed, namely, authority conflict, commitment, impersonality, and goal displacement. These rankings were to be compared to the scale scores from the questionnaire as a measure of validity. However, this approach had to be abandoned due to changes in the scales and indices which made supervisors' ratings inapplicable. For example, in order to assess degree of commitment, Department Heads were asked to rate teachers on the basis of their participation in professional activities and extracurricular activities, and their effort to update and improve knowledge in the field in which they teach. However, the final index that was constructed for commitment was based on teaching experience and service in a particular school. Consequently, the rating was not germane to the final index.

Therefore, a second approach was adopted. During September and October, 1963, the Office of Research for the Baltimore City Public Schools conducted a staff study of teachers in the school system. This study included information about tenure status, grade levels and subjects

²⁰For a brief description of the major methods for determining empirical validity see Parten, op. cit., pp. 486-494.

taught, extracurricular and curricular assignments, number of students, and salary level for each teacher. Availability of this information, then, provided a second source of information for comparison purposes. Comparison of the information contained in the questionnaire to the staff study indicated a high level of validity.

A second indication of the validity is the high rate of return of the questionnaire. Since 94 per cent of the 161 teachers sampled returned the questionnaire, this indirectly upholds the validity of the data.

ANALYSIS

The analysis of the data from the questionnaire examines the relationship of the control variable--rules--to a number of characteristics of the school, of the department, and of teachers. Earlier a number of hypotheses were formulated by considering rules as a dependent variable and as an independent variable. It was then hypothesized that certain characteristics were related to rules within the school. Some of the variables considered were: size of school, socioeconomic status of the school, authority conflict within the school, perceived teacher commitment, bureaucratically defined teacher competence, teacher impersonality, and goal displacement. The analysis will undertake to test these hypotheses and to explore these relationships.

Rules within Schools and Departments

First, in order to determine whether or not rules vary significantly within schools and within departments, a two-way analysis of variance by ranks was performed using the techniques developed by Friedman.¹ This design allows the investigator to compare k matched samples that are at least in an ordinal scale and to test to see if they have been drawn from the same sample. The data was cast in a table with 8 rows and 3 columns as shown below. For each department within a school the score on the rules scale was entered. In order to determine

¹Sidney Siegel, Nonparametric Statistics, (New York: McGraw Hill Book Co., 1956), pp. 166-172.

TABLE 5

Departmental Score on Rules Scale by School

Schools	Departments		
	English	Science	Industrial Arts
1	13	9	9
2	10	19	8
3	14	15	13
4	14	14	9
5	15	13	9
6	17	11	11
7	16	13	17
8	17	19	13

whether schools differ significantly with respect to rules the eight values in each column were ranked from 1 to 8. If the null hypothesis is true and there is no relation between departments and rules, the eight rankings would be expected to occur equally often in the eight rows. If the null hypothesis is false, the row totals would be expected to vary. Whether or not the differences between the row totals is significant can be tested by computing a statistic known as χ^2_r .

The value obtained in this case was 85.77 which is significant well above the 0.001 level.

Since using a two-way analysis of variance has allowed the investigator to control for differences among departments, it is apparent that average school scores on the rules scale vary significantly.

Next, the same procedure has been followed in ranking departments, while at the same time controlling for differences among schools in order to examine departmental differences. χ^2_s is 88.94 and is significant, again above the 0.001 level. This indicates that there is variation among departments on the rules scale independent of that due

to school difference. English departments are highest with Science departments second and Industrial Arts departments lowest.

However, in examining variation in rules among departments, an indirect method is used to determine the effect of differences inherent in the subject matter taught.² This is necessary because it is quite possible that differences in rules exist between departments due to a relationship between the subject matter area and the degree of rules controlling instructional matters. For example, it is possible that due to the professional training of science teachers in specific techniques and due to the more formal structure of science, one would expect to have more formalized procedures with regard to instructional matters in science departments; thus, a higher degree of specification with rules concerning instructional matters. Since this thesis cannot be tested directly, it must be done indirectly by determining whether or not the demonstrated relationship between rules and departments can be explained entirely on the basis of differences between departments other than subject matter, professional training and professional expectations, such as, size and sex of teachers.

Within schools, departments vary in size from 1 to 19 faculty members. In one sense this is related directly to the size of the school; however, it is also related to the nature of the department. English departments in general are larger than Science departments, which in turn are larger than Industrial Arts departments. Consequently, it is necessary to examine the effect of this variable on the

²Herbert Hyman, Survey Design and Analysis, (Glencoe, Ill.: Free Press, 1955), pp. 226-241.

degree of rules existing in the department. Possibly size alone may account for the lower level of rules existing in Industrial Arts departments.

This has been done by using a two-way analysis of variance by ranks. Departments were matched on the basis of the number of faculty members and scores on the rules scale were compared for the three types of departments sampled. Table 6 contains this classification of departments. χ^2_r in this case is 28.67 which is significant at the 0.028 level.

TABLE 6

Average Departmental Score on Rules Scale
by Size of Department

Size of Department	Department		
	English	Industrial Arts	Science
Number of Faculty			
1 - 5	17	11	12
6 - 8	16	13	19
9 - 16	14	9	13

Since even when department size is controlled, there are significant differences among the departments with respect to rules, it can be stated that differences in size among departments cannot account for these differences. Next it must be determined whether or not differences in teachers' sex among departments can account for the higher degree of rules existing in English departments. Since this department is predominantly female, the higher level of rules may be due to sex rather than to subject matter differences. This hypothesis can be tested by

calculating a measure of association, gamma (γ),³ between rules and departments while, at the same time, holding sex constant. Gamma can be used when two variables are ordered and may be interpreted as the improvement in prediction on one variable when the prediction is made with knowledge of the order of a second variable. It may range from 1 to -1 and is zero if the two characteristics are independent; i.e., knowledge of one variable does not help to predict order on the other variable.

TABLE 7
Frequency of Departmental Scores on
Rules Scale by Department by Sex

Sex	Department	Rules Score		
		Low 8-10	Medium 11-15	High 16-19
Male	English		10	
	Science	6	12	4
	Industrial Arts	17	13	1
Female	English	9	28	20
	Science		14	8
	Industrial Arts			

In order to use this measure of association the three departments have been ranked according to level of abstraction of the subject matter taught, with English ranking highest and Industrial Arts, the most concrete

³Morris Zelditch, *A Basic Course in Sociological Statistics*, (New York: Henry Holt & Co., 1959), pp. 180-186; and James A. Davis, "Notes on Gamma: Interpretation, Computation, Partials, Multiples," (Department of Sociology, University of Chicago, Spring, 1963). (Mineographed.)

and practical, the lowest. A partial gamma has been calculated for Table 7 by holding teachers' sex constant and is -0.19 indicating that there is a definite relationship between rules and subject matter irrespective of sex differences among the departments. English departments do indeed have the most rules concerning instruction while Industrial Arts departments have the least.

Since it has been determined that schools and departments vary with respect to the degree of rules, it is now necessary to examine a number of variables that might account for this variation. In the following sections of this analysis, rules are related to school, departmental, and teacher characteristics. Statistical evidence has been developed for the acceptance or rejection of a number of hypotheses. Specifically, it has been hypothesized that rules would increase with size, low socioeconomic status, low teacher competence, low teacher commitment, and high incidence of authority conflict. Also, it has been hypothesized that teacher impersonality and goal displacement would increase with the degree of rules.

However, it is likely that no one of these factors can completely explain this relationship between schools, departments, and degree of rules. On the one hand, subtle interactions among these variables may obscure the true relationship of any one variable within the school to the central variable, rules. For example, the effect due to a positive relationship with one variable may be canceled out by the effect due to a negative relationship with another variable. Consequently, due to the interaction between the two, it may be impossible to show a relationship of either singly without controlling for the other, or allowing for interactions in the design.

Also, the zero order association between the two variables might be caused by any one of a number of other variables. For example, the size of the school might account for the lack of commitment on the part of teachers who are overworked and at the same time account for the rules necessary to coordinate the activities of larger numbers of teachers.

The techniques used in this study permit us to examine only a few of these possibilities. This has been done by calculating a series of partial association coefficients, thus, statistically holding certain variables constant which might affect the zero order association being examined.⁴

On the other hand, it is quite possible that differences in rules between schools may be due to a more subtle constellation of variables which were not considered in the original design. By selecting a random sample an attempt was made to control for any systematic effect of other variables, such as, personality of the teachers and administrators involved, idiosyncrasies of particular schools and neighborhoods, special groups of students, etc.

In the following sections the relationship of each of the characteristics of schools, departments, and teachers which were enumerated earlier, will be examined with regard to the degree of rules.

Size, Socioeconomic Level and Rules

Two of the factors that were hypothetically related to the degree

⁴For a good discussion of the introduction of additional variables to elaborate an analysis and to test for spuriousness see Hyman, op. cit., pp. 242-331.

of rules within the school were the size of the school in terms of the student enrollment and the socioeconomic status of the students. Consequently, in order to ensure a representative sample of junior high schools with respect to these two characteristics, the population was stratified according to size and socioeconomic level. (See Table 1.)

Upon examining the distribution of schools in the population with respect to size and socioeconomic status, it appears as if the two variables are related. All but one of the schools under 500 student enrollment are attended primarily by students from the lower-lower class. At the other extreme, the larger schools--over 1500 student enrollment --are attended almost exclusively by upper-lower and middle class students. Consequently, in analyzing the relationship of these two variables to the degree of rules within the school, it is necessary to allow for interactions between size and socioeconomic status. This appears to be important due to the opposite direction of the two effects which have been postulated. It has been hypothesized that small schools would have a lesser degree of rules, and at the same time, that schools attended by students from a low socioeconomic level would be higher on the rules scale. Since all but one of the small schools is characterized as lower-lower class, the two effects might cancel each other and obscure any true difference if each of the variables were handled separately. However, with the small sample of ten schools and due to the fact that all possible combinations of size and socioeconomic status are not represented in the sample, it seems impossible to test for interactions using the present design. Therefore, the procedure followed was to perform two one-way analysis of variance tests using the Kruskal-

Wallis method to test the significance of the relationship between rules and size, and then to test the significance of the relationship between rules and socioeconomic status.⁵ The existence or non-existence of the postulated interaction might then be inferred from the results.

Tables 8 and 9 include the data for the two analyses of variance.

TABLE 8
Average Score on Rules Scale
for Schools by Size

Size - Student Enrollment		
Below 500 Students	500 to 1500 Students	Over 1500 Students
10	12	13
12	12	15
14	13	15
17		

The null hypothesis that the three samples came from the same population, and therefore no significant difference exists between the samples, can be tested, first, by ranking all of the scale scores in the table from highest to lowest, and then by computing a statistic known as H and determining its level of significance. The H value computed for Table 8 is 27.39 and is significant at the .01 level. Both large and small schools are significantly higher on the rules scale than medium size schools.

When H is computed for Table 9, again it is significant, this time above the .006 level. The actual value of it is 27.71. Schools

⁵Siegel, op. cit., pp. 184-193.

attended by children from a predominately lower-lower socioeconomic level are significantly higher on the rules scale, while schools in middle class neighborhoods are significantly lower on rules.

TABLE 9
Average Score on Rules Scale for Schools
by Socioeconomic Level

Socioeconomic Level		
Lower-Lower Class	Upper-Lower Class	Middle Class
13	10	12
13	12	12
15	14	
15	17	

This, then, may partially explain the outcome of the analysis of variance performed to examine the effect of school size. There is no difference between small and large schools on the rules scale, yet both are significantly higher than medium size schools. Since all small schools are attended by lower-lower class children, possibly socioeconomic effects offset the size factor. On the other hand, since large schools are also high on rules, this would indicate that size is also related to the degree of rules. This would then suggest that rules vary directly with size, and inversely with the socioeconomic level of the school, but that the latter effect is much more pronounced than that due to size.

Bureaucratically Defined Teacher Competence
and Rules

Another variable hypothetically related to the degree of rules

is bureaucratic competence. Competence in this sense is defined by the Baltimore City School Board's classification system. Three levels can be identified: elected teachers, non-elected or probationary teachers, and special substitute or provisional teachers. Teachers may, then, be classified according to the index of competence and according to their departmental score on the rules scale. This classification is shown in Table 10.

TABLE 10
Frequency of Teacher Competence by
Departmental Score on Rules Scale

Index of Competence	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Special Substitute	3	9	8	20
Non-Elected	3	16	6	25
Elected	26	59	19	104
Total	32	84	33	149

A measure of the degree of association in the contingency table is gamma. Gamma calculated for Table 10 is -0.310. This may be interpreted as meaning that if the level of rules existing in two departments is used to predict the order of two teachers' scores on the competence index, prediction of the correct order would be expected 31 per cent better than chance. Also, it can be interpreted as indicating that there is a negative association between rules and competence, i.e., when one is high, the other is low.

However, there are major differences among these three groups of teachers. Elected teachers have tenure and can only be fired for

serious cause. Ostensibly they receive little supervision and are considered as fully qualified teachers. Probationary teachers usually lack only the resident requirement of two years, but are heavily supervised, and must be elected after a satisfactory probationary period. Special substitute teachers usually lack the certification requirements and, in many instances, their bachelor's degree. These teachers are assigned to teach classes only on a temporary basis until a qualified teacher is available. These differences would suggest a more detailed analysis of the relationship of competence to rules.

TABLE 11

Elected Teachers versus Non-Elected and
Special Substitute Teachers
on Rules Scale

Index of Competence	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Non-Elected Special Substitute	6	25	14	45
Elected	26	59	19	104
Total	32	84	33	149

These differences may be examined by partitioning the table by competence. First, Table 10 has been divided into two sections: elected teachers, and others. Then, the second group has been partitioned into probationary teachers and provisional teachers. Tables 11 and 12 show these partitions. For Table 11 gamma is -0.32 , while gamma is -0.11 for Table 12. This would indicate that the major difference in rules for these three groups of teachers occurs between elected teachers and

other teachers. This fact is borne out by observations of instructional policy in Baltimore City. Elected teachers have little supervision and can only be dismissed for cause; whereas, the tenure of other teachers is dependent upon their completion of degree and certification requirements, a satisfactory probationary period, etc. In addition, little distinction is made among teachers who have not been elected to tenure status regardless of differences in academic preparation and prior experience.

TABLE 12

Non-Elected Teachers versus Special Substitute
Teachers on Rules Scale

Index of Competence	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Special Substitute	3	9	8	20
Non-Elected	3	16	6	25
Total	6	25	14	45

In order to test the significance of the relationships between competence and rules, it is necessary to adopt a second approach. This was due to the lack of an accepted test of significance for gamma. Consequently, the degree of association between the two variables was examined by using a chi-square (χ^2) method.

In order to determine whether or not the two classifications are independent, or in other words, the one variable used in the classification is independent of the other, the expected frequencies based on the assumption of independence are calculated and compared with the actual fre-

quencies obtained in the study. The question to be asked is whether the difference between these two sets of frequencies are such that they could not have occurred due to random sampling errors. This can be answered by calculating a sampling statistics called χ^2 .⁶

The level of significance of the value thus obtained can be determined by referring to a table of values for the χ^2 distribution. If more than one cell out of five has a frequency of five or less, it may be necessary to combine classification categories in order to meet this standard.

The sensitivity of the test can be increased by testing for trends in the contingency table.⁷ If the data can be arranged so that there is some order to the classification categories, the data can be tested for linear trends by the theory of linear regression. The overall chi-square value can be partitioned into a linear component and a curvilinear component.

In order to test for linearity, the regression of one of the variables on the other is calculated. Then the squares of the critical ratios obtained by dividing the regression coefficients by their standard errors are distributed as χ^2 with one degree of freedom. Using the χ^2 table, they can be tested for significance. Furthermore, the curvilinear trend can be tested for significance also since the remaining portion of the overall χ^2 value represents the departure from the regression line or that due to the curvilinear trend. Table 13

⁶For an excellent discussion of the use of the χ^2 Test and methods for increasing its sensitivity see A. E. Maxwell, Analyzing Qualitative Data, (New York: John Wiley & Sons, 1961).

⁷Ibid., pp. 63-72.

shows these two components from Table 10.

TABLE 13

Linear and Curvilinear Trends in Table 10

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	4.791	$P < 0.05$
Departure from Regression Line (Curvilinear)	3	1.589	N.S.
Total χ^2 Value	4	6.380	N.S.

It is evident that there is a significant linear trend in the data. This trend is linear rather than curvilinear since the curvilinear component is not significant. We can conclude that rules and competence are significantly related.

It is now necessary to determine the effect of departmental differences on the relationship between rules and competence. Earlier it was shown that departments vary with respect to rules, English departments being much higher than either of the other two, and Industrial Arts departments being lowest. Consequently, it is possible that differences between these departments might account for the association between the two variables. For example, English departments are composed almost entirely of women, many of them recently graduated from college. Consequently, one would expect a lower number of elected teachers. On the other hand, the department having the least rules, Industrial Arts, is composed of older males. Departmental differences, then, may account for the association between rules and competence.

When we examine this tentative explanation, it is disproved. In the first place, English departments contain a higher percentage

of elected teachers than do Industrial Arts departments. Furthermore, a partial gamma calculated as a measure of association between rules and competence while holding departments constant in Table 14 is -0.284 and is not substantially different from the zero order measure. Departmental differences cannot account for the original relationship between the two variables under consideration.

TABLE 14

Frequency of Teacher Competence by Departmental
Score on Rules Scale by Department

Departments	Index of Competence	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
English	Special Substitute		3	3
	Non-Elected	2	6	2
	Elected	7	32	15
Science	Special Substitute	2	2	5
	Non-Elected	1	7	3
	Elected	3	19	4
Industrial Arts	Special Substitute	1	4	
	Non-Elected		3	1
	Elected	16	8	

Another variable that might account for this association is sex. As in the case of departments, there is a difference between males and females in the school. Many of the male teachers who have been in the school system more than two years are elected. However, a number of

women are provisional teachers. In this capacity they substitute for fully qualified teachers in the case of their unavailability, maternity leave, illness, sabbatical leaves, etc. Since this is the case, one might expect women on the whole to have more rules and to have proportionally fewer elected teachers at the same time men would be subject to fewer rules and have a higher proportion of elected teachers.

TABLE 15

Frequency of Teacher Competence by Departmental
Score on Rules Scale by Sex

Sex	Index of Competence	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Male	Special Substitute	3	7	1
	Non-Elected	1	8	1
	Elected	19	24	3
Female	Special Substitute		2	7
	Non-Elected	2	8	5
	Elected	7	35	16

Again this possibility may be tested by holding sex constant. This has been done in Table 15. A partial gamma has been calculated to measure the degree of association between competence and rules with sex held constant. The value of -0.385 . As before, sex does not account for the zero order association. Furthermore, this explanation for the finding is further discredited by examining the levels of competence of male and female teachers. Female teachers, found to be subject to the

most rules, score higher on the competence index. A larger percentage of female teachers are elected and a smaller percentage are classified as special substitutes. Consequently, sex differences cannot possibly account for the original relationship between competence and rules.

A third variable that might account for the original relationship is the socioeconomic level of the school. It may be hypothesized on the one hand that elected teachers are concentrated in the higher socioeconomic level schools where rules were found to be lowest. On the other hand, it would be expected that teachers who are lower on the index of competence to be concentrated in the lower-lower class schools. If this is true, then socioeconomic status, a characteristic of the school, would account for the association between competence and rules.

TABLE 16

Frequency of Teacher Competence by Departmental
Score on Rules Scale by Socioeconomic Level

Socioeconomic Level of the School	Index of Teacher Competence	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Lower- Lower	Special Substitute		3	1
	Non-Elected			2
	Elected		10	6
Upper- Lower	Special Substitute	3	5	4
	Non-Elected	1	14	3
	Elected	12	33	12
Middle	Special Substitute		1	3
	Non-Elected	2	2	1
	Elected	14	16	1

This possibility has been tested in Table 16. Gamma has been calculated to measure the degree of association between the variables when socioeconomic level is held constant. The value obtained was -0.21.

Although the original degree of association has been reduced, it has not disappeared. Therefore, the socioeconomic level cannot account for the entire relationship. However, it does suggest that the socioeconomic level of the school has some effect on the association, possibly in the manner postulated.

Bureaucratically Perceived Commitment and Rules

Several different indicators of commitment were included in the questionnaire. However, after examining the data and becoming more familiar with the Baltimore City school system, it was decided that two of these questions would be used as the index of bureaucratic commitment. These were the number of years a teacher has taught, and the number of years he has been at a particular school. This index is suggested by the patterns of teacher mobility in Baltimore City. Since junior high schools are predominantly upper-lower and lower-lower class, there is a constant movement of teachers out of the city into the county school systems where teaching assignments are more attractive and the salary schedule is higher. Also, since the junior high schools include many students who will drop out as soon as they reach the legal age, there is a movement into the senior high schools where discipline is less of a problem and more content is included in the curriculum. Consequently, those teachers who stay in the city and in the junior high schools are viewed as being more committed and dedicated to their work. Consequently, these two factors have been taken as an index of perceived commitment,

Once this index has been constructed, teachers may be classified by commitment and by rules as in Table 17. The association between these two variables may be examined by calculating gamma for the contingency table. The value so obtained is -0.315 and indicates a negative association. Rules are highest where the index of commitment is lowest and vice versa.

TABLE 17

Frequency of Teacher Commitment Scores by
Departmental Score on Rules Scale

Index of Commitment	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Low 2 - 5	3	21	9	33
Medium 6	1	10	3	14
High 7 - 10	28	50	20	98
Total	32	81	32	145

As before, in order to test the significance of this relationship between the two variables, it is necessary to perform a regression analysis and to test the significance of trends in the table. This has been done with the techniques described earlier. As can be seen in Table 18, the linear component is clearly significant while the curvilinear component is not. This, then, indicates a significant linear association between the two variables, commitment and rules. In this case the relationship is inverse with one variable being high while the other is low.

TABLE 18

Linear and Curvilinear Trends in Table 17

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	4.359	$P < 0.050$
Departure from Regression Line (Curvilinear)	3	3.355	N.S.
Total Value	4	7.714	N.S.

As discussed before, it is possible to suggest several variables that might account for the relationship between commitment and rules. One of these is departmental differences. The department characterized by the most rules, English, is characterized by a lower proportion of teachers high on the commitment index. Young women may only teach one year or two prior to becoming full time housewives, and many who continue teaching migrate to the suburbs. At the other extreme, men in the Industrial Arts department have usually been in the school system longer and tend to remain at a particular school longer. They would then be high on the commitment index and at the same time low on rules.

Table 19 examines this hypothesis. Departments are held constant while the association between rules and the index of commitment is measured. The partial gamma in this case is -0.11. Consequently, departmental differences would appear to account for much of the relationship between the two variables. However, since the association has not completely disappeared, it may be concluded that there is some relationship between commitment and rules aside from that caused by departmental differences.

TABLE 19

Frequency of Teacher Commitment Scores by Departmental
Score on Rules Scale by Department

Department	Index of Commitment	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
English	Low 2 - 5	2	9	3
	Medium 6		4	2
	High 7 - 10	7	25	14
Science	Low 2 - 5	1	6	5
	Medium 6	1	6	1
	High 7 - 10	4	16	6
Industrial Arts	Low 2 - 5		6	1
	Medium 6			
	High 7 - 10	17	9	

Furthermore, it may be suggested that since English departments and Industrial Arts departments differ with respect to sex that this factor may account for the association between rules and commitment rather than other differences in the nature of the departments. This possibility may be examined by constructing Table 20 and calculating a partial gamma. When sex is held constant, the degree of association between the rules score and the index of commitment is -0.445 . This

indicates that sex alone cannot account for the original relationship between the variables and that sex and other departmental differences affect the zero order measure of association quite differently.

TABLE 20

Frequency of Teacher Commitment Scores by Departmental Score on Rules Scale by Sex

Sex	Index of Commitment	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Male	Low 2 - 5	1	13	2
	Medium 6	1	5	1
	High 7 - 10	21	21	2
Female	Low 2 - 5	2	8	7
	Medium 6		5	2
	High 7 - 10	7	29	18

The third variable to be introduced is the socioeconomic level of the school. Initially a strong relationship was demonstrated between this variable and rules. Consequently, all or part of the relationship between commitment and rules may be explained by this school characteristic. For example, it may be argued that teachers who stay in the school system will leave the less desirable schools in lower-lower class neighborhoods and move to other schools or to other school systems. This would account for lower scores on the commitment index in lower-lower class schools where rules are greatest. Also,

it would account for higher scores on the index in middle class schools where rules are least. Table 21 shows the effect of this variable on the zero order association.

TABLE 21

Frequency of Teacher Commitment Scores by Departmental
Score on Rules Scale by Socioeconomic Level

Socioeconomic Level of the School	Index of Commitment	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Lower- Lower	Low 2 - 5		3	3
	Medium 6		2	1
	High 7 - 10		8	5
Upper- Lower	Low 2 - 5	1	17	3
	Medium 6	1	7	2
	High 7 - 10	14	26	13
Middle	Low 2 - 5	2	1	3
	Medium 6		1	
	High 7 - 10	14	16	2

The partial gamma is -0.189, a reduction of the zero order measure. This would suggest that socioeconomic level effects do account for some of the association between rules and commitment, but not all of the association.

Authority Conflict and Rules

For purposes of this study an index of latent authority conflict has been constructed from four of the questions on the questionnaire. These included the degree of dissatisfaction with administrative support, administrative recognition of teachers, class assignments, etc., and the expression of the need for teacher unions, collective bargaining, and formal grievance systems. These four questions have been taken as an index of authority conflict as they are indicative of latent dissatisfaction and attempts to influence administrative decisions.

In Table 22 teachers have been classified by the departmental rules score and their score on the authority conflict index. Gamma has been calculated for the table and is equal to -0.313 . From this value it can be seen that there is a definite relationship between the two variables, but the direction is opposite to that postulated in the section concerning hypotheses, i.e., there is an inverse relationship rather than a direct one.

TABLE 22

Frequency of Authority Conflict Scores
by Departmental Score on Rules Scale

Index of Authority Conflict	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Low 4 - 7	1	8	8	17
Medium 8 - 9	7	14	6	27
High 10 - 12	16	30	11	57
Total	24	52	25	101

The significance of this relationship can be tested indirectly if the regression coefficients are calculated. From this the significance of the linear component and the curvilinear component of the overall χ^2 value can be tested. These are given in Table 23. Clearly the linear relationship between the two variables is significant. Consequently, it is evident that the inverse relationship does exist; that one variable is high when the other is low.

TABLE 23

Linear and Curvilinear Trends in Table 22

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	5.447	$P < 0.025$
Departure from Regression Line (Curvilinear)	3	1.591	N.S.
Total χ^2 Value	4	7.038	N.S.

In order to try to explain this relationship several test variables were introduced. Two of these were departmental differences and sex. One might expect English departments to be less inclined toward unions and collective bargaining for several reasons. First, traditionally, women have been much more difficult to organize into unions. Also, many young women who are teaching English are not career oriented and do not plan to teach for more than a few years. Their interest in unions and collective bargaining as means of obtaining higher salaries, smaller classes, and less administrative duties would be limited. At the same time these departments have the highest scores on the rules scale. On the other hand, Industrial Arts departments, which are low

on rules, are composed exclusively of males, many of whom have been teaching for a number of years. Here, one would expect much more interest in union tactics for improving teachers' positions.

Second, the professional training and outlook for the two departments are quite different. English, being more abstract, requires college preparation and is characterized by an emphasis on verbal skills. On the other hand, Industrial Arts teachers have generally had industrial experience instead of college work and rely heavily on manual skills and technical training. These differences, inherent in the subject matter and the background and outlook of the type of teacher drawn to the particular discipline, may account for the fact that the department with the least rules is also characterized by the most interest in unions and collective bargaining.

This possible explanation of the association between rules scores and the index of authority conflict can be tested by calculating partial gammas and comparing them to the zero order measure. This has been done for Tables 24 and 25. First departments were held constant and then sex was controlled. The two gammas are -0.192 and -0.230 , respectively.

Since the zero order measure of association has been reduced but has not disappeared entirely, these two variables may account for some of the association between the index of authority conflict and rules, but cannot account for all of it.

In order to examine these two effects due to subject matter difference and due to sex, it is necessary to examine the relationship of each variable to the index of authority conflict while holding

the other one constant. This has been done in Table 26 for authority conflict and subject matter and in Table 27 for authority conflict and sex. In each case the other variable has been held constant. Gamma for Table 26 is 0.233 indicating that both male and female English Teachers score lower on the authority conflict scale on the average than do corresponding Science teachers. There is a definite relationship between the subject matter that an individual teacher is concerned with and his attitude toward the school's administration and teacher unions. This relationship cannot be explained in terms of sex difference between the departments.

TABLE 24

Frequency of Authority Conflict Scores by Departmental
Score on Rules Scale by Department

Department	Index of Authority Conflict	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
English	Low 4 - 7	1	6	4
	Medium 8 - 9	4	8	4
	High 10 - 12	2	12	6
Science	Low 4 - 7		1	4
	Medium 8 - 9	1	2	2
	High 10 - 12	4	11	5
Industrial Arts	Low 4 - 7		1	
	Medium 8 - 9	2	4	
	High 10 - 12	10	7	

TABLE 25

Frequency of Authority Conflict Scores by Departmental
Score on Rules Scale by Sex

Sex	Index of Authority Conflict	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Male	Low 4 - 7		3	
	Medium 8 - 9	3	6	1
	High 10 - 12	14	13	3
Female	Low 4 - 7	1	5	8
	Medium 8 - 9	4	8	5
	High 10 - 12	2	17	8

TABLE 26

Frequency of Authority Conflict Scores
by Department by Sex

Sex	Department	Index of Authority Conflict		
		Low 4 - 7	Medium 8 - 9	High 10 - 12
Male	English	2	2	1
	Science		2	12
	Industrial Arts	1	6	17
Female	English	9	14	19
	Science	5	3	8
	Industrial Arts			

In the case of Table 27 the influence of sex on the authority conflict has been examined, this time holding subject matter constant. Gamma in this case is -0.101 indicating that there is some small effect due to sex but that it is not as pronounced as subject matter effects. As would be expected female teachers are not as prone to voice dissatisfaction and to support teacher unions as are men. These differences between male and female teachers cannot be explained solely on the basis of subject matter differences because of the preponderance of women in English departments. Each variable, sex and subject matter, has its own effect on authority conflict scores.

TABLE 27
Frequency of Authority Conflict Scores by
Sex by Department

Department	Sex	Index of Authority Conflict		
		Low 4 - 7	Medium 8 - 9	High 10 - 12
English	Male	2	2	1
	Female	9	14	19
Science	Male		2	12
	Female	5	3	8
Industrial Arts	Male	1	6	17
	Female			

Another possible explanation of this association may be the influence of the socioeconomic factor. Teachers in lower-lower class schools may be less interested in any type of professional association including unions. Since there is a constant movement to schools in higher socioeconomic areas, one would expect those teachers who are career

oriented to teaching to move into upper-lower class and middle class schools. It would be expected that the latter group of teachers would manifest a higher interest in unions, collective bargaining, and grievance systems as a means of improving their working conditions.

This possibility has been tested by controlling for the socioeconomic level of the school and by examining the scores of teachers in the lower-lower class schools. The suggested explanation of the finding that authority conflict scores are related to the level of rules within the department is discredited by the partial gamma value of -0.384 from Table 28 and by the fact that 75 per cent of the teachers in the lower-lower class schools score high on the authority conflict index as opposed to 53 per cent in upper-lower class schools and 55 per cent in middle class schools. Consequently, socioeconomic differences cannot account for the demonstrated relationship between rules scores and the index of authority conflict.

Differences in competence and tenure status between teachers may be suggested as another possible explanation of the relationship between the two variables. One might argue that teachers who have tenure may be more prone to voice their dissatisfaction with administrative support and policies. Also, since teaching is a career for them, they may be more inclined to be in favor of teacher unions, collective bargaining, and grievance systems. At the same time, the more competent teachers have the least rules.

This possibility can be tested by examining the relationship of authority conflict to competence to rules. Table 29 shows the distribution of teacher scores on the authority conflict index by competence categories. Gamma is 0.28 and there is a significant linear relationship

as shown in Table 30.

TABLE 28

Frequency of Authority Conflict Scores by Departmental
Score on Rules Scale by Socioeconomic Level

Socioeconomic Level of the School	Index of Authority Conflict	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Lower- Lower	Low 4 - 7			1
	Medium 8 - 9		2	
	High 10 - 12		5	4
Upper- Lower	Low 4 - 7		7	5
	Medium 8 - 9	3	9	4
	High 10 - 12	10	16	6
Middle	Low 4 - 7	1	1	2
	Medium 8 - 9	4	3	2
	High 10 - 12	6	9	1

TABLE 29

Frequency of Authority Conflict Scores
by Teacher Competence

Index of Competence	Index of Authority Conflict			Total
	Low 4 - 7	Medium 8 - 9	High 10 - 12	
Special				
Substitute	5	5	7	17
Non-Elected	1	6	6	13
Elected	11	16	44	71
Total	17	27	57	101

TABLE 30

Linear and Curvilinear Trends in Table 29

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	2.715	$P < 0.10$
Departure from Regression Line (Curvilinear)	3	3.182	N.S.
Total χ^2 Value	4	5.997	N.S.

Once an association between authority conflict and competence has been established, the hypothesis above can be tested in Table 31.

TABLE 31

Frequency of Authority Conflict Scores by Departmental Score on Rules Scale by Teacher Competence

Index of Competence	Index of Authority Conflict	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Special Substitute	Low 4 - 7			5
	Medium 8 - 9	1	2	2
	High 10 - 12	2	4	1
Non-Elected	Low 4 - 7		1	
	Medium 8 - 9	1	3	2
	High 10 - 12		5	1
Elected	Low 4 - 7	1	7	3
	Medium 8 - 9	5	9	2
	High 10 - 12	14	21	9

The partial gamma obtained by holding competence constant is -0.19. This is somewhat lower than the original zero order association between authority conflict and rules, but it is still significant. Consequently, differences in competence among teachers cannot account for all of the association between rules and authority conflict, although they account for some of it.

Teacher Impersonality

Impersonality was defined as formality in relationships between teachers and students which results in treating all students as if they belong to a common class without regard for individual differences. In order to obtain an index of impersonality in teacher-student relations, the scores on several questions were combined. This index considers the following factors: assignment of textbooks, conferences with students after school, and grading considerations.

Once the index has been constructed, it can be related to the departmental rules score in a contingency table and a measure of association can be calculated. Earlier it had been hypothesized that impersonality in teacher-student relations would vary directly with the level of departmental rules. This hypothesis has now been tested in Table 32. Gamma for the table is 0.014. Also χ^2 calculated for the two-way classification is 1.661. This is not significant and indicates that there is no association between the rules score and the impersonality index at all.

However, the index of impersonality may be related to several other variables. First, impersonality has been related to departmental differences. Differences on the impersonality index would be expected

due to the major differences among departments with respect to subject matter, sex, experience, etc.

TABLE 32

Frequency of Impersonality Scores by
Departmental Score on Rules Scale

Index of Impersonality	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Low 4 - 9	11	31	14	56
Medium 10 - 11	5	24	8	37
High 12 - 20	6	26	7	39
Total	22	81	29	132

Conceivably, impersonality is related to the nature of the subject matter. For example, possibly the formal structure of science, the specificity of procedures, and the scientific method may account for the use of the same techniques and approach with all students (one of the major considerations in measuring the degree of teacher impersonality). Consequently, this hypothesis must be tested.

Table 38 contains the two-way classification of teachers by department and by impersonality scores. The χ^2 value of 10.707 for the table is significant at the 0.05 level. From the table it is evident that a higher proportion of teachers in the Industrial Arts department are high on the impersonality index, while a significantly lower number of teachers in the English department are high on the index. Science departments fall in between.

TABLE 33

Frequency of Impersonality Scores by Department

Departments	Index of Impersonality			Total
	Low 4 - 9	Medium 10 - 11	High 12 - 20	
English	33	15	15	63
Science	15	16	10	41
Industrial Arts	8	6	14	28
Total	56	37	39	132

One obvious difference between departments is sex. Industrial Arts departments are exclusively male while English departments are composed almost totally of females. Science departments usually contain both with the proportion of males varying from 20 per cent to 75 per cent in the sample. Consequently, it is necessary to examine the relationship of sex to the scores on the impersonality scale. This has been done in Table 34. When χ^2 is calculated for the contingency table a value of 8.074 is obtained and is significant at the 0.025 level. Male teachers score significantly higher on the impersonality index than women.

TABLE 34

Frequency of Impersonality Scores by Sex

Sex	Index of Impersonality			Total
	Low 4 - 9	Medium 10 - 11	High 12 - 20	
Male	18	16	24	58
Female	38	21	15	74
Total	56	37	39	132

However, since English departments are composed predominantly of women and Industrial Arts departments exclusively of men with Science departments varying between these two extremes, it is necessary to re-examine both of these relationships while controlling for sex and for subject matter. This has been done in Tables 35 and 36. When sex is controlled, gamma, a measure of association for subject matter and impersonality scores is 0.18. When Table 35 is examined, however, it is found that among women teachers, those in the English department on the average score lower on the impersonality index than do science teachers. Among males there appears to be an opposite effect. Science teachers on the whole are slightly lower than English teachers. This finding would suggest that sex differences are a much more important determinant of impersonality scores than are subject matter differences. This tentative conclusion has been further explored in Table 36, this time relating impersonality scores to sex while holding subject matter constant. Gamma in this case is -0.29 which indicates that men do indeed score higher on the impersonality index regardless of the subject taught. Apparently sex has a decided bearing on attitudes toward personalizing instruction.

TABLE 35

Frequency of Impersonality Scores by Department by Sex

Sex	Departments	Index of Impersonality		
		Low 4 - 9	Medium 10 - 11	High 12 - 20
Male	English	3	2	4
	Science	7	7	6
	Industrial Arts	8	6	14
Female	English	30	13	11
	Science	8	9	4
	Industrial Arts			

TABLE 36

Frequency of Impersonality Scores by Sex by Department				
Departments	Sex	Index of Impersonality		
		Low 4 - 9	Medium 10 - 11	High 12 - 20
English	Male	3	2	4
	Female	30	13	11
Science	Male	7	7	6
	Female	8	9	4
Industrial Arts	Male	8	6	14
	Female			

Also, it is quite possible that other differences between schools may be related to impersonality. Two such variables are school size and socioeconomic level. One might postulate that in larger schools a higher degree of impersonality in relations between students and teachers would be expected. Where teachers have more students, more administrative duties, and a greater number of colleagues, reason would suggest that there would be less time for individual attention to students. Also, socioeconomic status might affect this variable. In schools attended by students from the lower socioeconomic status, again, greater impersonality in student-teacher relations would be expected. Discipline problems, retardation among students, lack of interest, would reasonably lead to the teacher devoting less time to individual students. Consequently, it seems important to examine the relationship of these two variables to impersonality. Tables 37 and 38 explore the first hypothesis. Gamma for Table 37 is 0.315.

TABLE 37

Frequency of Impersonality Scores
by Size of School

Size of the School	Index of Impersonality			Total
	Low 4 - 9	Medium 10 - 11	High 12 - 20	
Small	5	6	1	12
Medium	18	6	6	30
Large	33	25	32	50
Total	56	37	39	132

TABLE 38

Linear and Curvilinear Trends in Table 37

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	4.328	$P < 0.050$
Departure from Regression Line (Curvilinear)	3	5.173	N.S.
Total χ^2 Value	4	9.501	$P < 0.050$

Also, the overall χ^2 value computed for the contingency table is significant, indicating differences between the small, medium, and large schools in the proportion of teachers ranking high on the impersonality index. Furthermore, there is a significant linear trend in the data, with more teachers in large schools high on the index and fewer teachers in small schools high on the index. Medium size schools fall in between.

The second hypothesis that impersonality is related to the socioeconomic level of the school is examined in Table 39. If gamma is

computed, the value is 0.197.

TABLE 39

Frequency of Impersonality Scores by
Socioeconomic Level of the School

Socioeconomic Level of the School	Index of Impersonality			Total
	Low 4 - 9	Medium 10 - 11	High 12 - 20	
Lower-Lower	9	6	3	18
Upper-Lower	35	21	23	79
Middle	12	10	13	35
Total	56	37	39	132

This relationship has also been tested by examining the table for linear and curvilinear components. Table 40 gives the results of this analysis. There are definitely significant differences among the three categories of schools with respect to the proportion of teachers scoring high on the impersonality index. However, the relationship is curvilinear and in the opposite direction from that predicted. Lower-lower class schools have the lowest proportion of teachers high on the impersonality index while middle class schools have the highest proportion.

TABLE 40

Linear and Curvilinear Trends in Table 39

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	2.363	N.S.
Departure from Regression Line (Curvilinear)	3	9.476	$P < 0.025$
Total χ^2 Value	4	11.839	$P < 0.025$

Goal Displacement

An index of goal displacement has been constructed from six of the questions on the teacher's questionnaire. These included teaching techniques used by the teacher, interest in new curriculum developments, and interest in new teaching techniques, such as, team teaching, teaching machines, and educational television. Since goal displacement has been defined as the transference of attention from the primary goals of the organization to the prescribed means of obtaining these goals, these questions form an index for measurement purposes.

Table 41 gives a breakdown of teachers by their score on the goal displacement index and by the departmental rules score. Gamma for the table is -0.074 . If χ^2 is calculated for the contingency table, it is found to be 1.5252, and is not significant. Consequently, it is concluded that goal displacement is not related to rules.

TABLE 41

Frequency of Goal Displacement Scores by
Departmental Score on Rules Scale

Index of Goal Displacement	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Low 6 - 9	9	33	10	52
Medium 10 - 11	10	22	9	41
High 12 - 18	8	16	6	30
Total	27	71	25	123

However, as discussed earlier, departmental differences are so

pronounced, it was suspected that scores on the goal displacement index are related to the type of department. This relationship has been examined in Table 42. The χ^2 value of 10.663 is significant at the 0.05 level. Teachers in Science departments are proportionately lower on the goal displacement than either of the other two departments. Teachers in Industrial Arts are highest, with English teachers between the two.

TABLE 42

Frequency of Goal Displacement Scores by Department

Departments	Index of Goal Displacement			Total
	Low 8 - 9	Medium 10 - 11	High 12 - 18	
English	26	17	18	61
Science	16	13	1	30
Industrial Arts	10	11	11	32
Total	52	41	30	123

Since one of the major differences between English and Industrial Arts departments is sex, it is necessary to examine the relationship of sex to goal displacement in order to see if this factor can account for the differences between the departments in the proportion of teachers who score high on the goal displacement scale. Table 43 shows the distribution of scores for the two groups. χ^2 is 2.025 and is not significant. This indicates that males and females do not differ significantly on the goal displacement index. Consequently, differences in sex between the departments cannot explain the previous

relationship of goal displacement to departments.

TABLE 43

Frequency of Goal Displacement Scores by Sex

Sex	Goal Displacement Score			Total
	Low 6 - 9	Medium 10 - 11	High 12 - 18	
Male	28	16	14	58
Female	24	25	16	65
Total	52	41	30	123

A fourth variable to be related to goal displacement is school size. Schools have been classified by student enrollment. Small schools have under 500 students, medium size schools have 500 to 1500 students, and large schools have over 1500 students. Table 44 relates school size to the scores of teachers on the goal displacement index. Gamma, calculated as a measure of association between the variables, is 0.218.

TABLE 44

Frequency of Goal Displacement Scores
by Size of School

Size of School	Index of Goal Displacement			Total
	Low 6 - 9	Medium 10 - 11	High 12 - 18	
Small	7	2	3	12
Medium	14	9	5	28
Large	31	30	22	83
Total	52	41	30	123

A regression analysis has also been performed on Table 44 and the results are shown in Table 45. There are significant differences among the three groups of schools with regard to the proportion of teachers high on the impersonality index, but the relationship between the variables is curvilinear rather than linear. Large schools and small schools have proportionately more teachers high on the index than medium size schools.

TABLE 45

Linear and Curvilinear Trends in Table 44

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	1.729	N.S.
Departure from Regression Line (Curvilinear)	3	10.727	$P < 0.025$
Total χ^2 Value	4	12.456	$P < 0.025$

The same type of analysis has been carried out for teachers in schools classified by socioeconomic level. Table 46 gives this classification. Gamma is 0.349. Also, the data has been examined for linear and curvilinear trends. Table 47 indicates a significant linear trend in the data. Middle class schools have the highest proportion of teachers who scored high on the goal displacement index, while lower-lower class schools have the lowest proportion. The proportion of teachers with high scores on the goal displacement index in upper-lower class schools falls somewhere in between. This linear relationship is significant at the 0.025 level.

TABLE 46

Frequency of Goal Displacement Scores by
Socioeconomic Level of the School

Socioeconomic Level of the School	Index of Goal Displacement			Total
	Low 6 - 9	Medium 10 - 11	High 12 - 18	
Lower- Lower	11	3	4	18
Upper- Lower	35	22	16	73
Middle	6	16	10	32
Total	52	41	30	123

TABLE 47

Linear and Curvilinear Trends in Table 46

Source of Variation	Degrees of Freedom	χ^2	Significance Level
Due to Linear Regression	1	5.504	$P < 0.025$
Departure from Regression Line (Curvilinear)	3	6.011	N.S.
Total χ^2 Value	4	11.515	$P < 0.025$

Teachers' Sex and Rules

Finally, it seems important to examine the sex of the teacher and its relationship to departmental rules. So far in the analysis, it has been shown that sex is related to almost every other variable. For example, within sex groups, the relationship between rules and competence, and rules and commitment is more pronounced; part of the association between authority conflict and rules appears to be due to the relationship of sex to the two variables, scores on the impersonality index

are significantly higher for men; and differences on the goal displacement index do not appear to be related to sex.

At this point sex has been related to departmental rules scores in Table 48. It is evident that male teachers are subject to rules to a much lesser degree than are female teachers. χ^2 for the contingency table is 21.29 which is significant at the 0.001 level.

TABLE 48

Frequency of Departmental Scores on Rules Scale by Sex

Sex	Rules Score			Total
	Low 8 - 10	Medium 11 - 15	High 16 - 19	
Male	23	39	5	67
Female	9	45	28	82
Total	32	84	33	149

However, since two of the departments selected are characterized by one sex, it is necessary to examine whether or not this relationship to the degree of rules is due to sex differences or to differences due to subject matter. It is known from the results obtained earlier in the analysis that English departments are highest on the rules scale on the average. Since most English departments are composed almost entirely of women, possibly this will account for this latter finding that female teachers are subject to more rules. In order to examine the plausibility of this explanation, it is necessary to examine Science departments where the proportion of male and female teachers varies greatly. This has been done in Table 49. There is a strong relationship between the percentage of female teachers in the department and the degree of rules. Gamma is

0.833, indicating that as the proportion of male teachers decreases, the degree of rules increases. This lends strong support to the original finding that the degree of rules in a department is related to the sex of the teachers within that department.

TABLE 49

Frequency of Departmental Scores on Rules Scale
by Percentage of Female Teachers
in Science Departments

Percentage of Female Teachers	Rules Score		
	Low 8 - 10	Medium 11 - 15	High 16 - 19
0 - 25	1	2	
26 - 75		2	1
76 - 100		1	1

Another possible explanation is that the relationship between sex and rules is spurious and is caused by differences in competence or commitment between the two groups of teachers. Both of these variables are related to sex and to the degree of rules. Earlier it was demonstrated that competence and commitment are both inversely related to the degree of rules. Since male and female teachers differ on both of these indices, it is necessary to examine the plausibility of this explanation. When this is done, it is found that differences in competence and differences in commitment cannot possibly account for the relationship between sex and rules. Partial gammas for Tables 50 and 51 are 0.64 and 0.69, respectively. Also proportionally more female teachers are higher on both indices than are men. Consequently, there is strong evidence that the make up of a department in terms of the

proportion of male and female teacher is decidedly related to the degree of rules concerning instructional matters existing within the department, irrespective of the tenure status or experience of the teachers.

TABLE 50

Frequency of Departmental Scores on
Rules Scale by Sex by Competence

Index of Competence	Sex	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Special Substitute	Male	3	7	1
	Female		2	7
Non-Elected	Male	1	8	1
	Female	2	8	5
Elected	Male	19	24	3
	Female	7	35	16

TABLE 51

Frequency of Departmental Scores on Rules
Scale by Sex by Commitment Scores

Index of Commitment	Sex	Rules Score		
		Low 8 - 10	Medium 11 - 15	High 16 - 19
Low 2 - 5	Male	1	13	2
	Female	2	8	7
Medium 6	Male	1	5	1
	Female		5	2
High 7 - 10	Male	21	21	2
	Female	7	29	18

FINDINGS

This study has attempted to construct a theory concerning the development and functioning of rules within organizations with particular application to the junior high school. Rules were viewed as bearers of organizational authority in guiding and directing subordinate actions in the accomplishment of a common goal. This notion follows from Max Weber's bureaucratic theory of organizations which postulates that authority becomes attached to offices within the bureaucratic structure rather than to individuals, at least in those organizations that legitimate their claim to authority on a legal-rational basis.

Nine functional effects of rules were postulated, namely,

- (1) directing subordinate effort toward a sub-goal of the organization.
- (2) controlling behavior from a distance.
- (3) impersonalizing relations between superiors and subordinates.
- (4) regulating the discretion allowed subordinates.
- (5) protecting organizational members from extra-organizational pressure.
- (6) legitimating the use of punishment by superiors.
- (7) acting as a bargaining point between superiors and subordinates.
- (8) legitimating the authority of superiors.

(9) providing security for the members of the organization.

From these theoretical considerations, a number of hypotheses were formulated relating rules, considered as a dependent variable, to individual, organizational, and environmental characteristics. The major questions to be examined are: do rules actually perform the postulated functions?; and can a clear relationship be demonstrated between rules and these characteristics?

Furthermore, a number of dysfunctional consequences were also hypothetically related to rules, this time considering rules as an independent variable. These latent effects arise out of attempts to impersonalize the administration of the organization and to delineate authority and responsibility through rules. Two of the major dysfunctions that have been treated in the bureaucratic literature are impersonality and goal displacement. Questions to be asked are: are these two bureaucratic characteristics present in the school?; is the degree of impersonality and the degree of goal displacement related to the level of rules in the school?; how are these characteristics related to other organizational and environmental characteristics?

The section entitled, Scaling, contains a discussion of the development of operational definitions, scales and indices for the variables considered in this study. The actual scales and indices are presented in Appendix V.

The analysis of the data obtained from the survey has tested the hypotheses and has examined a number of alternative hypotheses that hypothetically might account for zero order relationships between two variables. This technique is the usual one of introducing a number

of test variables to elaborate an analysis and to test for spuriousness. The initial theory of rules will now be examined in the light of these findings.

Size, Socioeconomic Level, and Rules

The analysis has demonstrated that schools differ significantly with respect to rules. Two of the variables that, in part, account for this variation are socioeconomic level of the student body, and size of the school in terms of student enrollment.

A one-way analysis of variance demonstrated that lower-lower class schools were significantly higher on the rules scale than upper-lower class schools which, in turn, were higher than middle class schools. Several possible factors may be suggested to account for this finding. First, the heterogeneity of the student body in the lower-lower class schools substantially increases the complexity of administration and teaching in these schools. Usually, children from all socioeconomic levels are represented in the student population even though a preponderance of children are from culturally deprived areas. Also, teachers are assigned classes with a wide range of abilities from academic to basic or terminal. Both factors would lead to a wider range of textbooks, ability groups, curriculum guides, programs, etc. Consequently, this may lead to the development of more rigid prescription in instructional matters through rules.

In addition, there is an element of urgency attached to lower-lower class schools which is absent from upper-lower or middle class schools. High incidence of dropouts, discipline cases, high rates of absenteeism, vocationally oriented students, home problems, and a

higher rate of emotionally disturbed, all add up to create a critical situation. On the one hand, a high rate of retardation could swamp the school with the ever increasing number of children coming from the elementary schools, while on the other hand, a high rate of attrition through drop-outs will only lead to more unemployment and delinquency. Consequently, education in these schools is characterized by a sense of urgency. Again, the level of rules regarding instructional matters would be expected to be augmented.

When size is considered, a one-way analysis of variance indicates that both large schools (over 1500 student enrollment) and small schools (under 500 student enrollment) are significantly higher on the rules scale than medium size schools (500 to 1500 student enrollment). At first this finding appears strange; however, it may be explained by considering the interaction between size and socioeconomic level in the sample. Since all but one of the small schools in the sample are attended by lower-lower class students, it appears as if the effect of socioeconomic differences is much stronger than the effect of size. Large schools are high on the rules scale, indicating a definite effect due to size. At the same time, small schools are high on the scale indicating the socioeconomic effect, which apparently overshadows the size effect.

These findings support two of the earlier hypotheses. First, it was hypothesized that the level of rules within the school would vary directly with the size of the school. Second, it was hypothesized that rules would vary inversely with socioeconomic level of the community.

As the number of students and faculty assigned to a particular school increases, it would appear that the directional and decentralizing functions of rules come into play. The complexity of administration in schools where departments and classes are large, several academic programs are offered, and the problems of discipline and remedial work accentuated, may cause the administration to direct teachers' actions through rules rather than by direct explication and informal conferences. Procedures are formalized to a much greater extent. Decentralization of authority is accomplished through specification and the embodiment of authority in rules. This becomes necessary due to the reduced frequency of face-to-face contacts between administrators and teachers and due to the reduction in direct supervision.

The socioeconomic factor also seems to activate rules in order to perform several functions. The first of these is a protective function where there is disparity between the cultural and ethical values of teachers and students. In the eyes of administrators this potential conflict may necessitate a more formal specification of instructional procedures especially with regard to assignments, testing, and grading. This may become necessary in order to ensure a low rate of failure and retardation and the frustration that leads to rebellion.

On the other hand it may provide security for teachers who are uncertain as to how much effort on their part is required. When instructional procedures are specified, the onus for failure of students to achieve is taken from the teacher. As long as he adheres to the curriculum guide and accepted procedures, he cannot be held responsible for this lack of success. Rather, the blame can be shifted to the

students or to the procedures, whichever is most expedient.

The final function that rules perform in this instance is the narrowing of discretion allowed teachers. In schools attended by lower class students, the problems of preventing drop-outs, remedial work, and satisfactory accomplishment is viewed as acute. A great deal of recent literature and experimentation has centered around the culturally disadvantaged. Consequently, administrators charged with the responsibility for demonstratable success in these schools, may resort to prescription of means that they believe will ensure success. As a result there is less room for diversity and experimentation by individual teachers, for some progress must be achieved, drop-outs and retardation must be kept in bounds, behavioral problems must be checked. In a situation charged with anxiety and characterized by complexity and heterogeneity such as this, one would expect more rules circumscribing teacher behavior with regard to instruction.

Bureaucratically Defined Teacher Competence and Rules

Although no attempt has been made to measure teacher competence, an index has been used to indicate levels of competence as defined by the school system. These are: elected teachers, non-elected teachers, and special substitute teachers. Student teachers and teachers paid on a per diem basis were excluded from consideration.

Originally, it had been hypothesized that rules would vary inversely with teacher competence. That is, rules would be high when competence is low, and when competence is high, rules would be low. This hypothesis is borne out by the findings. There is a significant

linear relationship between the index of competence and rules scores. Furthermore, the zero order association between these two variables is significant even when subject matter, sex, and socioeconomic level of the school are introduced as third variables which might account for this relationship.

This finding may be explained in terms of the functions that rules perform. It would appear that where competence is low, at least in terms of the proportion of tenure teachers, rules are used to limit discretion on the part of the teacher and to direct his actions in accordance with accepted practice. The big difference in rules occurs between elected teachers, who have tenure status, and other teachers who are either probationary or special substitutes. Little difference in rules was detected between these last two groups. Thus, in practice the school system makes little distinction between teachers who have not met the minimum requirements for election regardless of differences in academic background, prior experience, age, etc. All teachers falling into this category are allowed much less professional autonomy and their actions are circumscribed by rules.

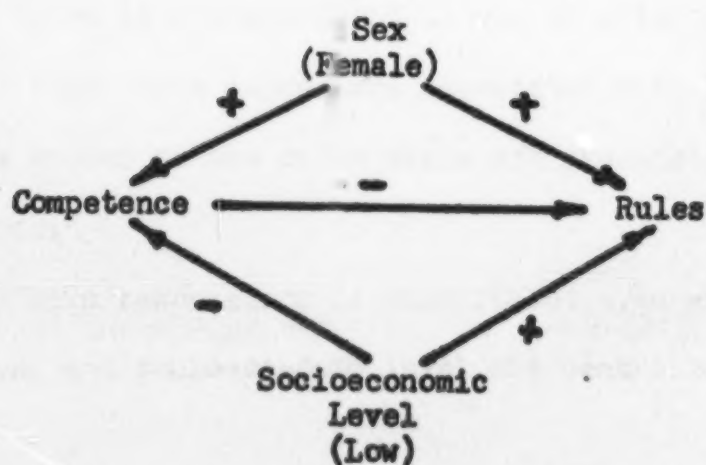
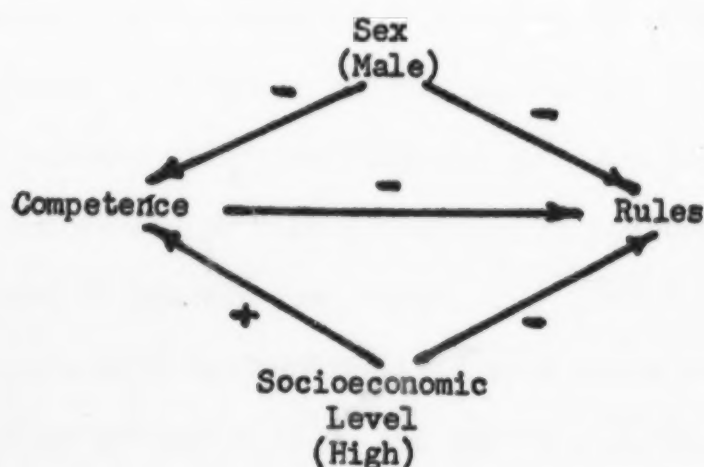
However, the relationship between the two variables is not as simple as first surmized. Although subject matter has no effect on the degree of association, socioeconomic level does. When this environmental characteristic is controlled, the zero order association between rules and competence is reduced somewhat. This suggests that some of the relationship between the two variables under consideration is caused by their relationship to the test variable, socioeconomic level. The following causal structure suggests itself. Rules are more pronounced in

lower-lower class schools. As discussed earlier, rules in these schools may serve a boundary function and a protective function due to the critical nature of work among impoverished and minority groups. On the other hand, it is evident from the data that middle class schools have slightly more elected teachers and fewer special substitute teachers than do lower class schools. Teachers with tenure naturally move to schools where the teaching situation is more desirable. Consequently, one would expect to find some degree of association between rules and level of competence within these schools due to the socioeconomic factor.

In addition, when sex is controlled, the measure of association between the two variables is attenuated. This can be accounted for when both of the variables are related to sex. In the first place, sex has been related to rules while holding competence constant. Female teachers are significantly more subject to rules than are males. Gamma in this case is 0.63. Secondly, the percentage of female teachers elected is higher than among males. An examination of the data indicates that 73 per cent of the female teachers are elected as opposed to 65 per cent of the males. Moreover, 20 per cent of the males are classified as special substitutes as opposed to 9 per cent of the female teachers. Since females are higher on rules and higher on competence at the same time that males are lower on both measures, this would account for the depressing effect that sex has on the zero order association between competence and rules when it is not controlled. However, within sex groups an even stronger association is found between the level of competence and the degree of rules, adding weight to the initial hypothesis.

The conclusion that can be drawn from this analysis is that the degree of rules is inversely related to the level of competence, but that both differences in sex and socioeconomic level influence this relationship. Rules, in this case, serve to direct the actions of less experienced teachers along lines consonant with accepted practice, to restrict the discretion allowed these teachers in lower class schools, to protect teachers and administrators from outside pressure and to control the behavior of less experienced teachers in schools characterized by a preponderance of non-elected teachers and/or a more heterogeneous student body.

From these findings the following patterns of relationships can be suggested:



Female teachers are more likely to attain tenure status in the Baltimore City School System than are males. At the same time, female teachers are subject to more rules than are males even after they have attained tenure status. Nevertheless, there is a clear association between level of competence and rules within both sex groups. Also, socioeconomic factors are related to both of the central variables, Lower-lower class schools have fewer elected teachers and at the same time have proportionately more rules. At the other extreme, middle class schools, with fewer rules, have more elected teachers. But, again, within socioeconomic levels the degree of rules is associated with the level of competence.

Bureaucratically Perceived Commitment and Rules

Commitment, for purposes of this study, is an experience factor including the amount of teaching experience and the length of service in a particular school. Since mobility of teachers from urban schools to the suburbs and to senior high schools is so pronounced, this appears to be a good index of teacher commitment.

Earlier, it had been hypothesized that rules would be high where commitment is perceived to be low and vice versa. This hypothesis has been examined with the data obtained from the junior high schools.

First, there is a significant linear association between the two variables. High rules scores are associated with low commitment scores, and low scores on the rules scale are associated with high commitment scores.

Second, this association is significant even when departmental differences, sex, and socioeconomic level are controlled; although,

again, each of these variables has some effect on the relationship under examination.

As before, these findings can be accounted for in terms of the initial theory of rules. When experience is low among teachers, the directional and boundary functions of rules come into play. Rules are used to ensure conformance to prescribed practice and procedures. Within the Baltimore City Schools, status and promotion is contingent on experience to a large extent. Two years of teaching within the system are required before a teacher is considered for election to tenure status. Also, teaching experience is the prerequisite for counseling and administrative positions. Consequently, it is apparent that the administration resorts to rules to restrict and direct actions of the less experienced teachers.

When departments are controlled, the relationship between rules scores and commitment scores is greatly reduced but does not disappear. This finding suggests the following plausible explanation. English departments are characterized by a significantly higher degree of rules than are either of the other two departments. This phenomenon will be tentatively accounted for later, but may be due to vagueness of goals and lack of performance measures in comparison to Industrial Arts departments and Science departments. Also, English departments are characterized by a lower percentage of teachers scoring high on the index of commitment. This may be due to the traditional movement of females from colleges and universities into English departments, and finally into the homes as full time housewives. Whereas Industrial Arts teachers are typically older men who have some outside experience

in the profession in which they teach. These two facts would then account for part of the association between low levels of commitment as measured by experience and a high degree of rules.

Since one of the major differences between departments is sex, the effect of this variable on the relationship between rules and commitment has been examined in order to distinguish between subject matter effects and sex effects. Within sex groups the association is stronger. This can be accounted for statistically in the same manner as before. The analysis indicated that female teachers were much higher on the rules scale than are male teachers even when level of commitment is controlled. Also, it showed that a larger proportion of women score higher on the commitment scale than men. This may be indicative of the fact that women are much more likely to make a career of teaching at the secondary school level. From these two findings, it is possible to account for the higher level of association between commitment and rules within sex groups.

This finding sheds light on the departmental effect discussed earlier. Since sex as a test variable influences the association between rules and commitment in the opposite direction from the departmental effect, it is apparent that two variables are related to rules and to commitment, namely, subject matter and sex. The departmental effect is due to differences inherent in the subject matter and the type of teacher associated with the various disciplines. Expectations and professional training certainly vary from subject to subject. Possibly teachers trained in certain fields are conditioned to accept more centralized controls; whereas, other teachers expect

more professional autonomy. For example, Science has traditionally been a more individualistic discipline with latitude and discretion allowed teachers and tolerance for diverse approaches.

Since English teachers are subject to the most instructional rules, another factor may enter into consideration, that is, the central role that English plays in education. Reading, writing, and speaking, the communication skills, are all prerequisite to success in any other field of endeavor and in other subjects. The critical role played by English and its importance to the student's future development may encourage a greater degree of specification in instructional matters.

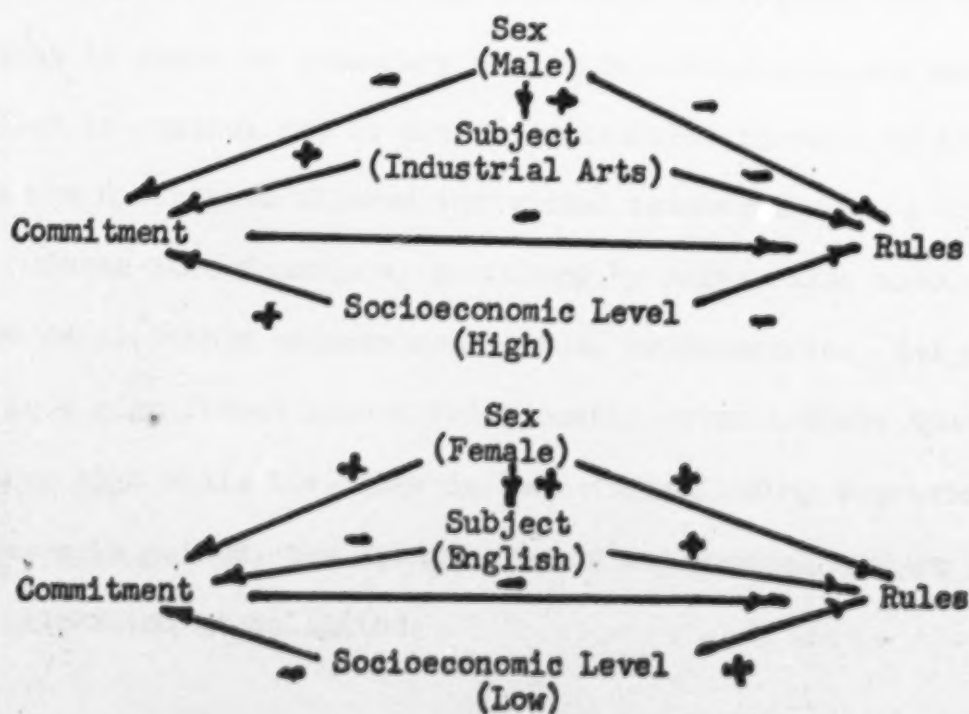
Sex differences between departments cannot account for this effect. Each of these variables has its own effect on the relationship between rules and commitment. The relationship of sex to the two variables, rules and commitment, is exactly the opposite from that just described. Female teachers are higher on the commitment index at the same time that they are subject to more rules. As has traditionally been the case, teaching still is a woman's profession to a very great extent. Male teachers on the average have less experience and do not remain in the profession or the school as long as their female colleagues. At the same time women are subject to more rules regardless of experience.

Furthermore, when socioeconomic level is controlled, the zero order association is reduced. This can be explained by relating socioeconomic differences to rules and to commitment. It has already been shown that the socioeconomic level of the school and the degree of rules within the school are linearly related with middle class schools

having the least rules. This has been accounted for in terms of the complexity, urgency, and heterogeneity characterizing the school. Now it can be shown that middle class schools have proportionately more teachers high on the commitment index than do upper-lower or lower-lower class schools. Examination of the data indicates that only 59 per cent of the teachers sampled from lower-lower class schools obtain high scores on the commitment index as opposed to 82 per cent for middle class schools. This combination of high commitment and low rules, and low commitment and high rules due to socioeconomic differences would then account for part of the association between the two variables.

From this discussion it can be generally concluded that the level of commitment is negatively associated with the degree of rules. This relationship is affected by subject matter differences, sex, and socioeconomic factors.

As in the case of competence, a theoretical structure can be formulated in which to view these complex relationships. One such structure is shown below.



Differences in temperament and professional expectations between male and female teachers are important factors in the selection of a discipline, the longevity of a teacher (commitment) and the degree of bureaucratic rules to which they are subject. Female teachers are concentrated in English departments, are more likely to make a career of teaching, and are generally more bureaucratized. Males in Industrial Arts departments, on the average are less experienced in teaching and are subject to fewer rules. These differences may be tentatively accounted for in terms of personality and temperament differences between the sexes.

In addition there is an effect due to intrinsic subject matter differences. Industrial Arts teachers have more teaching experience at the same time that they are subject to fewer rules. The opposite is true in the case of English teachers. They are subject to a higher degree of rules and are less experienced on the whole. Here it would seem that the directional, decentralizing, and boundary functions of rules are operative. Due to the importance of English and the central role that it plays in secondary education, administrators may feel compelled to control and to direct instruction through rules and to narrow the discretion allowed individual teachers.

These same functions, performed by rules, also account for the inverse relationship between commitment, or experience, and rules. There is a significant linear relationship between these two variables, one being high while the other is low. This finding suggests that as experience is gained, the need to direct and control actions and to limit discretion is mollified.

Finally, the socioeconomic level of the students attending the school is related to the level of experience and to the degree of rules. Teachers naturally gravitate to middle class schools as they gain seniority. As a result the younger, less experienced teachers are assigned to schools located in lower class neighborhoods. At the same time there are more rules specifying acceptable instructional procedures. Apparently, in these schools rules perform protectional and security functions in addition to the functions discussed above. These functions are necessitated by the urgency of success and by the heterogeneity of the student body representing many cultural levels and presenting a host of remedial problems. Rules concerning instruction in this case protect the teacher and offer security from criticism for failure to accomplish the goals of the school.

Authority Conflict and Rules

Authority conflict has been defined as the tension that a person feels due to the imposition of two or more contradictory sources of authority. In constructing an index for this variable, the following attitudes were considered: dissatisfaction with administrative support and policies, and support for teacher unions, collective bargaining and grievance systems.

Subsequently, this index was related to rules scores for the departments. The relationship in this case is inverse and linear. High scores on the authority conflict index are associated with low rules scores. This finding contradicts one of the hypotheses, namely, that more rules would be found in organizations characterized by a high incidence of authority conflict.

In an attempt to explain this finding, a number of test variables were introduced, namely, subject matter, sex, socioeconomic level, and competence. All of these variables affected the original relationship in one direction or the other, but none completely explained it.

First, it was hypothesized that the department characterized by the most rules, English, would be the least likely to be oriented toward unions and collective bargaining, mainly because of the preponderance of women. Traditionally, women have been harder to organize collectively into unions. Also, young women who plan to teach for a few years before marriage or pregnancy are not concerned with collective bargaining and grievance systems.

This explanation in terms of differences in attitude between male and female teachers is disproved by the data. Rather, the important factor appears to be differences between teachers trained in the various disciplines regardless of sex. Both male and female English teachers are lower on the authority conflict index than teachers in the other two departments. At the same time they are subject to more instructional rules as was demonstrated earlier. Apparently, the type of person recruited as an English teacher and the professional training he receives both, somehow, predispose him to show little interest in unions and their tactics.

Second, socioeconomic effects were posited as a possible explanation of this finding. It was suggested that in middle class schools with fewer rules that there would be more interest in teacher unions as a means of furthering the position of teachers with respect

to salary, class size, sick leave, etc. This is not the case, however. Teachers in lower class schools show more interest in unions and voice their dissatisfaction more frequently. Also there are more instructional rules in these schools.

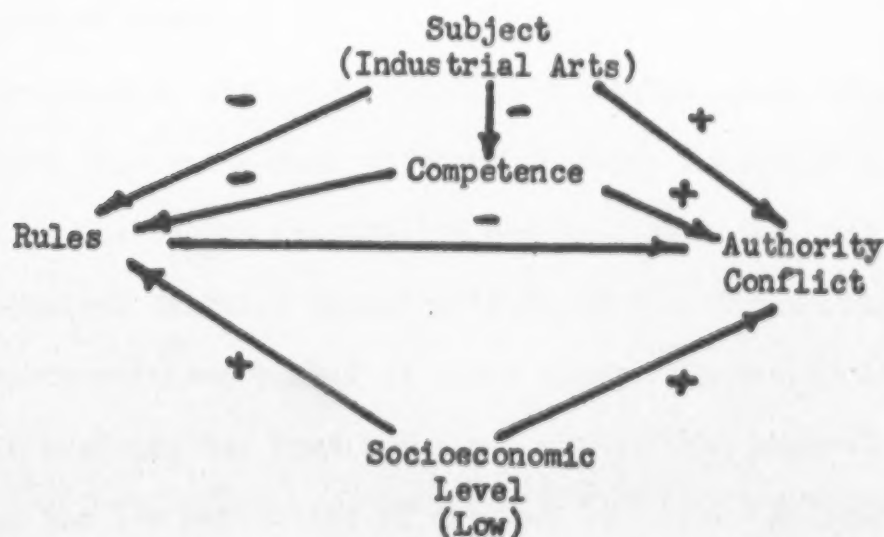
One obvious explanation for this finding is that the problem incurred in teaching culturally deprived youngsters due to low ability and motivation, discipline and drop-out problems, and the preponderance of terminal students, breeds dissatisfaction and is conducive to interest in a more militant professional group--unions. The concomitant higher level of rules was discussed earlier.

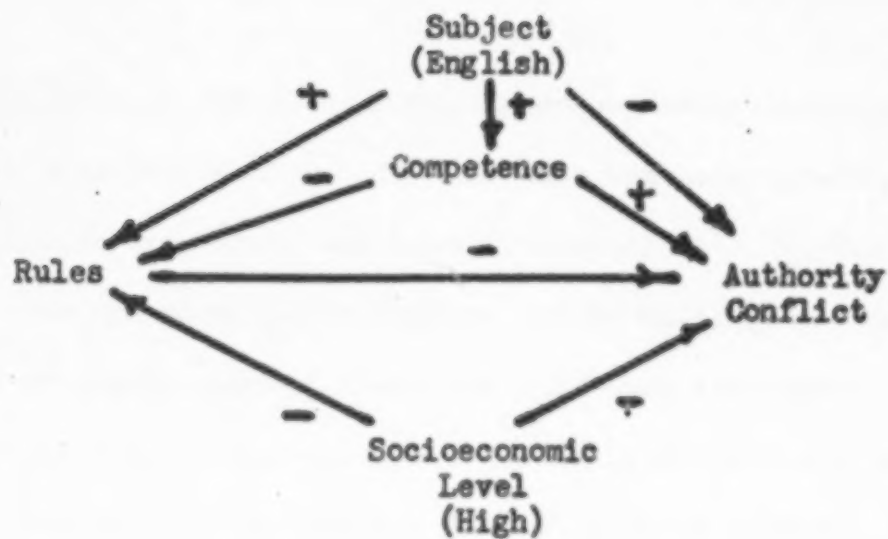
Third, it was hypothesized that the association between rules and authority conflict is spurious and is due to differences in competence among teachers. The analysis partially bears out this explanation. Elected teachers are more prone to voice dissatisfaction and to evidence interest in unions. This may be due to the fact that they have tenure status and are secure in their positions. At the same time this group is subject to the least amount of rules. Consequently, this may account for some of the association between rules and authority conflict, but not all of it; for when competence is held constant, the association between rules and authority conflict does not disappear.

The failure of all of these test variables to account for the original association would lend support to several of the theoretical functions of rules, namely, the security function, the impersonalizing function, and the authority legitimating function. Conceivably, a minor degree of rules serves a security function for teachers. In a sense, rules serve as guidelines for behavior, indicating to the

teacher what is expected of him. As long as he abides by established procedures, his teaching ability cannot be questioned, and he cannot be held accountable for the failure of these practices in the case of basic classes, drop-outs, slow learners, etc. On the other hand, rules legitimate and impersonalize authority for superiors, thus, reducing anxiety and conflict. Administrative personnel are only performing the functions assigned to them by the school board. They too are abiding by rules and enforcing rules that become imbued with the impersonal authority of the organization. Thus, authority is legitimated and impersonalized, and conflict is reduced. As long as the rules are not overbearing and are reasonable, they are readily accepted. This, then, may account for the lack of authority conflict as measured by union sentiment in those departments where there are more rules and the increased union sentiment in those departments and schools characterized by a lower degree of rules.

Now that all of these relationships have been examined, the following pattern of interactions can be constructed:





As can be seen from the diagrams, these relationships are extremely complex. Subject, levels of competence, rules, and authority conflict are all interrelated. Industrial Arts departments are peculiar in that they are characterized by a smaller number of elected teachers and, at the same time, are lower on the rules scale. Apparently intrinsic factors particular to Industrial Arts as a discipline and the type of person found in this department are important in determining the level of rules. This finding is in direct opposition to an earlier one indicating that a low proportion of elected teachers was associated with a high degree of rules.

Furthermore, authority conflict is higher among male Industrial Arts teachers than among male teachers in other departments. Again, this appears to be due to the personality and temperament of the individuals and the technical training characteristic of this discipline. Many men in this department have worked at their trade before entering the schools. Also, their training has been technical rather than academic which may account for the low percentage of elected teachers. In addition their interest in unions may stem from their affiliation with trade unions at

one time.

English, on the other hand, is an academic discipline requiring college preparation. In this case teachers intentionally prepare for a teaching career and have no contact with unions. Since opportunities are more limited unless one is willing to relinquish his field of study, many of these men and women are career teachers. This difference in background would partially account for the greater number of tenure teachers and the general lack of interest in unions. The higher level of rules existing in English departments will be discussed in detail later.

Socioeconomic level also is related to both rules and authority conflict. As has been discussed earlier, for a number of reasons rules perform directional, decentralizing, boundary, protective and security functions in these schools due to the smaller number of elected teachers and the unique problems of dealing with underprivileged children. The higher level of authority conflict as evidenced by dissatisfaction and union sentiment may be due to frustration, poor teaching positions, and the personality of individuals who attempt to accomplish something in these schools rather than flee as others do.

Finally, there appears to be an inverse relationship between the degree of rules and the level of authority conflict in the department which can not be accounted for by any of these considerations. This finding has been accounted for above in terms of the security function, the impersonalizing function, and the authority legitimating function of rules.

Teacher Impersonality

An index of impersonality has been constructed from several questions pertaining to student assistance, grading considerations, etc. This index has been used to measure the tendency of teachers to treat all students alike. Although it was hypothesized that impersonality would be directly related to the degree of rules within the school this has been disproved. No association was detected between the two variables. This finding will now be examined in terms of the relationship of impersonality to several of the other variables in this study.

There are distinct departmental differences on the impersonality index, however, due to the differences in the proportion of male and female teachers among the departments. All male Industrial Arts departments have the highest proportion of teachers scoring high on the impersonality index. English departments, heavily female, have the lowest proportion, with Science departments in between on the impersonality index and in terms of the ratio of male to female teachers. Sex appears to be a major determinant of the degree of personalized instruction that a teacher gives to students.

Subject matter per se seems to be an indirect factor only in so far as women appear to be concentrated in those subjects with a higher degree of abstraction and where the emphasis is on verbal ability. For example, Industrial Arts, a subject characterized by emphasis on manual skills, concrete projects, and technical training, is exclusively taught by male teachers. English teachers, who evidence the most individualized approach to instruction, are mainly female. Here the emphasis is on communication skills, citizenship training, self-

expression, etc. In the case of Science, at this level the curriculum is much less abstract and more concerned with simple experiments, demonstrations, and explanations of basic physical phenomenon. At the same time the proportion of male teachers varies between the two extremes as does the average impersonality score.

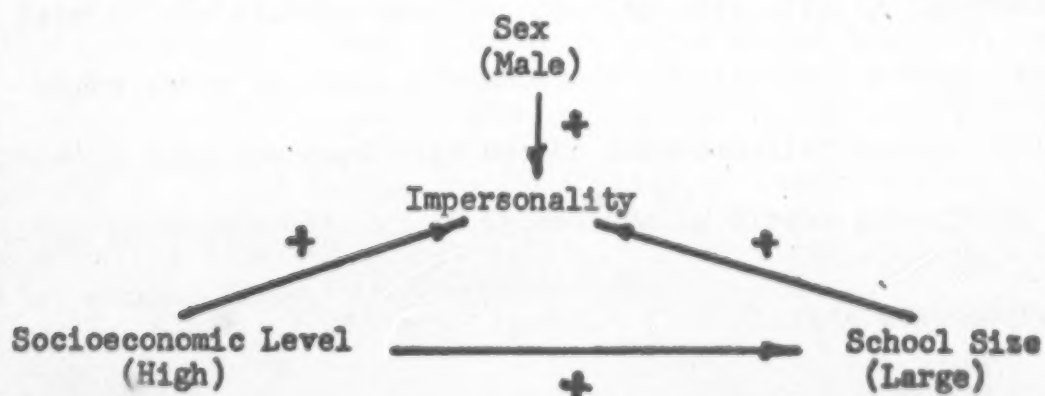
Differences between male and female teachers in interest, attitudes, temperament, and expectations, then, is a major determinant of the degree of individualized instruction.

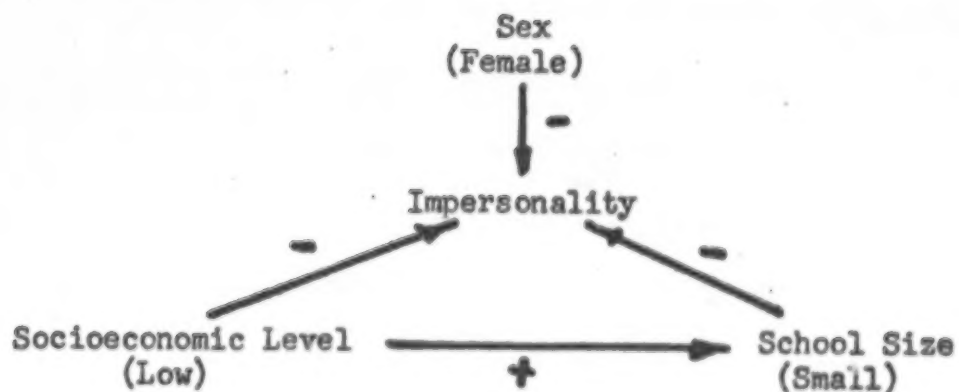
School size also appears to affect the impersonality scores of teachers. If impersonality scores are classified according to school size in terms of student enrollment, a significant linear trend is found. The larger the school, the higher the proportion of teachers high on the impersonality index. It would appear that size and all of the variables concomitant with size, such as complexity, heterogeneity, diversity, etc., significantly affect the teacher's approach to instruction. This finding has important implications in that the trend is definitely toward larger schools with increased faculty and student body.

If this finding is substantiated by future research, it may mean that definite steps will have to be taken to counteract this tendency toward depersonalization of instruction. Several recent developments show promise, such as, reduced class size, schools within schools, flexible team teaching, and tutoring by other students.

Finally, if the socioeconomic level of the school is considered, it is found to be related to the proportion of teachers whose scores are high on the index of impersonality. Lower class schools are lowest, while middle class schools are highest. This finding also overturns a

number of preconceived notions about the influence of socioeconomic factors on instruction. From the discussion in magazines and journals of the cultural gulf between students and teachers in the lower class schools, and the picture of the deplorable teaching conditions in these schools, exactly the opposite effect would be predicted. The findings of this study would suggest that this is too simple an explanation and does not take into account the influence of other factors. One of these is the effect of heterogeneity on instruction. Teachers in lower class schools are forced to deal with children with a wide range of cultural backgrounds and abilities. Conceivably, this may force them to be more aware of individual differences and may lead to more individualized instruction. In middle class schools where the student body is much more homogeneous, the opposite may be true. The similarity of background and ability grouping may lead to a more impersonalized type of instruction pitched at the hypothetical average student. Again, this finding has important implications if it is substantiated by additional research. If anything, the trend has been toward more homogeneous schools and classes. Traditionally, it has been thought that grouping by ability allows the teacher to accomplish more with the students in his classes. However, the findings of this study would suggest that there may be an unanticipated consequence of this practice, increased impersonality.





From these findings a causal structure may be suggested. Impersonality appears to be directly related to the sex of the teacher, the background of the students, and the size of the school.

Female teachers on the whole make more of an attempt to personalize and individualize instruction than do males. This finding may be accounted for tentatively in terms of differences in personality as well as in terms of the role traditionally assigned women in our culture. Not only has the primary function of women been viewed as bearing children, but, also, education at the primary and secondary levels has been viewed as a woman's profession in the past. The position that women are relegated to in our society may encourage a certain amount of empathy for and emotional involvement with students. This attempt to individually assist students is evident when the approach to instruction utilized by women is compared to that of male teachers.

Size of the student body and faculty also affects impersonality scores. Where there are more students and faculty in a school, there are proportionally more teachers high on the impersonality index. This relationship is linear with rates increasing in direct proportion to the size of the student body.

In order to understand the nature of this relationship between impersonality scores and size, it would be necessary to examine a host of variables that are associated with size. Here we can only speculate about several of these variables that may be important. As the number of students increase in a school, a number of factors change. In the first place, several academic programs must be offered in addition to remedial work. This means that teachers must deal with classes on several different levels and student turnover is much greater. Increased faculty also means increased supervision and rules. Once the number of teachers in a department reaches six or more, a department head is appointed with additional supervisory duties. Furthermore, the frequency of direct contact between teachers and students is reduced, administrative and clerical duties are increased, extracurricular assignments are more frequent. All of these factors vary with the size of the school and may contribute to the depersonalization of instruction.

Socioeconomic factors also appear to contribute to the depersonalizing of teaching. Impersonality in student-teacher relations appears to increase as the socioeconomic level increases. It has been suggested that this surprising finding that instruction in lower class schools is more individualized, may be a result of teachers' attempts to deal with a wide range of problems associated with disadvantaged students.

Furthermore, when one considers the general implications of these findings, it would appear that impersonality is a much more complex phenomenon than suggested in the literature on bureaucracy.

All of the writings concerning organizational dysfunction have viewed impersonality primarily as a direct result of the bureaucratic form of administration. The findings of this study would tend to discredit this notion. Impersonality appears to be directly related to the sex of the teacher, the socioeconomic background of the students, and the size of the school. Male teachers who deal with middle class students in large schools are much higher on the impersonality index. Whereas, female teachers in smaller schools who deal with a much more heterogeneous student body from lower class neighborhoods appear to make much more of an attempt to personalize and individualize instruction.

Goal Displacement

Goal displacement has been defined as the transference of attention from the primary goals of the organization to the prescribed means of obtaining those goals. From those items evidencing interest in new curriculum developments and new teaching techniques, an index has been constructed. When this index is related to the departmental rules scores, no association is detected. Both γ and χ^2 are extremely low indicating no detectable association in the schools sampled. This finding disproves the hypothesis concerning goal displacement posited earlier, namely, that goal displacement would vary directly with the degree of rules within the organization. Before examining the significance of this finding, it is necessary to discuss the relation of goal displacement to other variables included in this study.

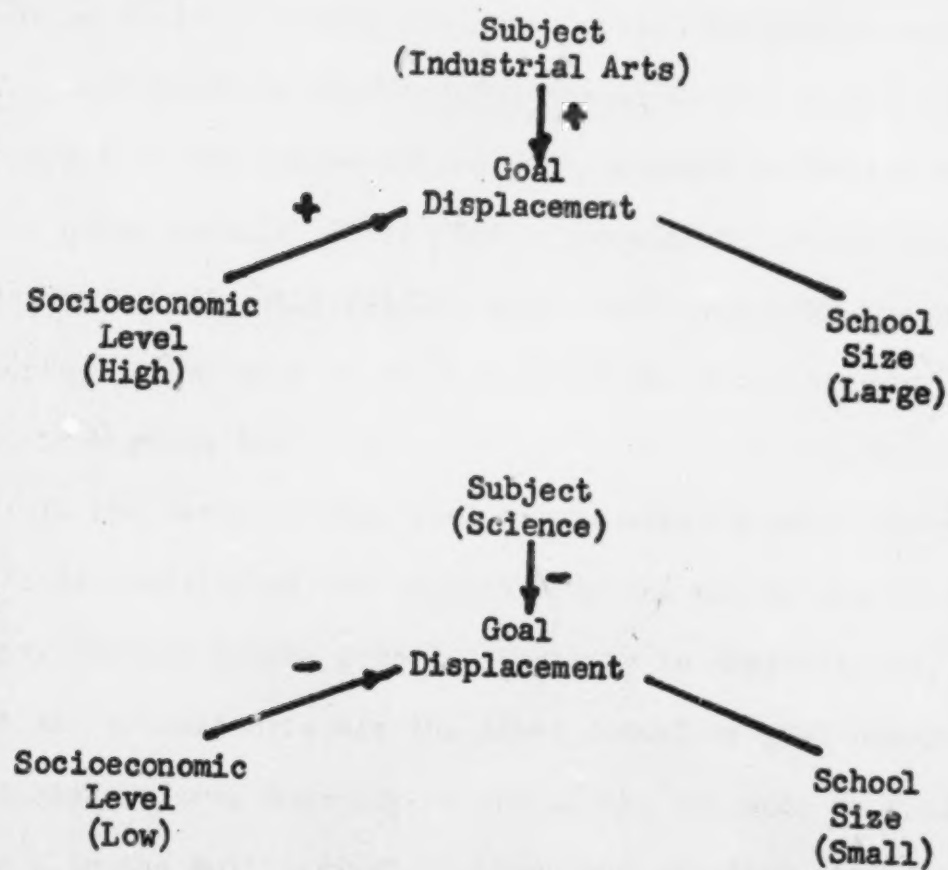
The first of these is departmental differences. Teachers in Science departments are significantly lower on the index of goal

displacement than other teachers. English teachers are next with Industrial Arts highest. In this case differences in sex between the departments cannot account for this finding. When male and female teachers are compared, no significant difference on the goal displacement scale is found. Consequently, this finding must be due solely to intrinsic departmental differences. One explanation of the fact that Science teachers are more interested in new approaches and techniques may be the wide acceptance of the new program in Mathematics, Chemistry, Physics, and Biology. Most teachers who have been in the schools for a year or two have come into contact with these programs through inservice training, reading, and their own academic work. Consequently, they may be more amenable to change. On the other hand, English programs in Baltimore City have not been altered significantly in more than a decade. Moreover, English programs in most schools have been fairly stable for some time, although currently there are proposals for changes in the English program at the secondary level. This, then, might explain the lower degree of interest in new approaches among English teachers. When the Industrial Arts program is considered, it becomes evident why little interest is expressed in new programs. Industrial Arts has been characterized by the traditional subjects, such as mechanical drawing, woodwork, metal shop, printing, etc., for half a century. Most of the teachers in this field have had experience outside of the school in their particular specialty and are highly committed to it as a vocation. Consequently, a higher degree of goal displacement would be expected among these men.

Next, the socioeconomic level of the school has been related to scores on the goal displacement index. Here, the data indicates a significant linear trend, with goal displacement increasing with the socioeconomic level. Lower class schools are lowest on the index and middle class schools are highest. This finding is in the opposite direction from that expected in view of the traditional notions of cultural differences between students and teachers and the great migration of teachers from the urban schools. It would appear that there are other more important factors that influence goal displacement. Two of these that were discussed earlier are heterogeneity and urgency. Again, it would appear that the heterogeneous student body found in lower class schools encourages teachers to look for new approaches and new techniques in teaching students with diverse abilities; whereas, the more homogeneous classes in middle class schools encourages reliance on traditional methods. Furthermore, the importance of demonstrating some success with students who have manifold problems and deficiencies may lead to interest in new programs and techniques which show promise, especially for large groups of students, such as, educational television, teaching machines, and team teaching. As was suggested before, this dysfunctional characteristic, goal displacement, may be a side effect of the homogeneous grouping of large numbers of students.

Finally, the relationship of school size to goal displacement has been examined. This association is curvilinear and it is difficult to draw inferences from it. If the low end of the scale is considered, small schools have proportionally more teachers at this end of the

scale than medium size or large schools. Large schools have fewer teachers with low goal displacement scores than medium size schools. However, if the high end of the scale is considered, both small and large schools have more teachers high on the index than medium size schools. This finding may indicate the effect of the interaction between size and socioeconomic level or it may be due to random error. Since there are only three teachers in the small schools who scored high on the index, a change of one would significantly influence the results. Consequently, this relationship needs to be reexamined with a larger sample of teachers.



From these relationships the above pattern is evident.

Goal displacement, defined as lack of interest in new teaching techniques and curriculum, appears to be a function of the subject, the

size of the school, and the socioeconomic level of the student body. Science teachers are the lowest on the goal displacement index, while Industrial Arts teachers are the highest. Size and socioeconomic effects are confounded, but apparently each has its own effect. Goal displacement increases with socioeconomic level. The effect of size has not been determined in this study.

These findings would point to the following conclusions. Goal displacement does not appear to be primarily a function of the type of administration and the degree of rules within an organization. In the first place, it appears to be directly related to the nature of the substantive activity within the department. Subject matter, professional training, and possibly recent developments in the discipline may have more of an impact on the degree of goal displacement evidenced by teachers than any other factors. This finding, again, disproves much of the theory that has directly related goal displacement to the degree of bureaucracy rather than to the nature of the activity that the organization is engaged in.

In the second place, goal displacement appears to be a function of the heterogeneity of the student body and the nature of the problems that they present to the school. Contrary to expectations, teachers in lower class schools evidence the least amount of goal displacement. As discussed before, this may be due to the attempts to find new ways to cope with the multitudinal problems and the diversity among the students. In this case teachers may welcome new curriculum developments and teaching techniques which show promise, more so than teachers in middle class schools who work in a more conventional situation with a

more homogeneous student body.

The importance of these two factors warrants consideration in any future research on teacher resistance to innovation.

Teacher's Sex

It is apparent that sex is a major variable in this study. Sex is certainly a major factor in the discipline which a teacher chooses. Women are concentrated in those disciplines which require more academic preparation, are highly verbal, and which are socially oriented. In the case of English, it fills all of these conditions and has for its goal such things as citizenship training, communication skills, cooperativeness, cultural appreciation, etc. On the other hand, technical subjects, such as, Industrial Arts, where the emphasis is on practical manual skills and an appreciation for the trades, are exclusively the realm of the male. Moreover, the data indicate that female teachers are more likely to obtain tenure status and remain in the Baltimore school system than men. When men and women are compared, 73 per cent of the female teachers are elected as opposed to 65 per cent of the males. Also, 69 per cent of the women are high on the commitment index which reflects experience, while only 65 per cent of the men have comparable scores. This is certainly not a surprising finding but substantiates the fact that women are more likely than men to make a career of teaching in Baltimore City.

What is more interesting is the relationship of sex to rules. The proportion of female teachers is apparently related to the degree of rules concerning instruction that exist in a department. As this proportion rises so does the level of rules. Even when the number of

tenure teachers (competence) and the amount of teaching experience (commitment) are controlled, female teachers are found to be more subject to rules than men. In fact the finding that female teachers are higher on both of these indices which are generally negatively associated with rules, while at the same time they are high on rules, simply underscores the sex effect. It can be concluded that women teachers are more subject to instructional rules in Baltimore City regardless of the department, of tenure status, and of experience.

One explanation for this finding is in terms of the functions that rules perform. First, the impersonalizing function of rules may be called upon when women administrators are dealing with women teachers. Earlier it was shown that with respect to instruction, female teachers have a tendency to become more personally involved with students. If this same tendency carries over into teacher-administrator relations, rules may be used to impersonalize these relations somewhat. In this way teachers can feel that they are simply following rules and administrators can feel that they are only administering rules laid down impartially by the principal, supervisors, or the school board. In this sense, then, rules also serve to legitimate the authority of superiors. Women teachers may be more prone to accept administrative authority when it is placed on a more impartial basis by rules rather than the more subjective authority implied in direct supervision. Also once authority has been legitimated, the punishment legitimating and bargaining functions of rules can be brought into play. Rules may imply or specify punishment which is to be expected if the teacher violates

instructions. If knowledge of this punishment is transmitted through impersonal rules, teachers may be more inclined to accept the consequences for disregarding accepted procedures. Furthermore, administrators may use enforcement of these rules for bargaining purposes. They may be enforced or not enforced depending upon the value to be gained.

Finally, rules in this instance may serve a security function for the teacher. By delineating what is expected, they may reduce anxiety over potential conflict and the fear of making mistakes. As long as demands on teachers are not inordinate, rules may be readily acceptable, even desirable, from the teacher's standpoint.

Sex, again, is an important factor in the degree of personalized instruction exhibited by teachers. Female teachers, overall, score much lower on the impersonality scale. This finding apparently has nothing to do with the subject taught but is directly related somehow to the temperament, emotional make-up, expectations, and personality of women who make a career in secondary education. Earlier it was suggested that the tendency of female teachers to become personally involved with students may be an outgrowth of our cultural heritage which relegates women to the role of rearing the young.

Finally, when authority conflict is considered, there is a major difference between male and female teachers. Of the males, 70 per cent are dissatisfied with administrative backing and policies and are in favor of teacher unions, collective bargaining, and grievance systems, as opposed to 47 per cent of the female teachers. One explanation for this decided difference between the two groups is that males, especially

those sampled in this study, have had much more exposure to unions than women. Many of the Industrial Arts teachers may have been a member of a trade union at one time and may be more favorably pre-disposed. On the other hand, female workers have traditionally been more difficult to organize. This may account for the relative lack of interest in unions among women teachers.

In the case of goal displacement, levels evidenced by teachers do not appear to be related to sex. Rather, there is strong evidence that goal displacement is related to subject matter differences and will be discussed in the next section.

Subject Matter Effects

It is apparent that throughout the analysis intrinsic subject matter differences are related to the degree of rules, levels of competence and commitment, and the degree of impersonality and goal displacement evidenced by teachers. It is now possible to suggest a number of tentative conclusions about these effects.

First, the subject matter taught in the department appears to have a decided effect on the degree of rules. English departments are characterized by a much higher degree of rules than Science and Industrial Arts departments. Industrial Arts departments are decidedly lower with respect to the degree of rules. Furthermore, the analysis indicates that size of department and differences in the percentage of female teachers cannot account for these differences in the degree of rules.

One possible explanation for these differences in rules concerning instructional matters is the intrinsic differences between the disciplines. English is a basic subject that is related to accomplishment

in all other subjects. It is characterized by a high level of abstraction and is based to a large extent on verbal ability. Since many of the stated goals of the English program are vague and esoteric, e.g., citizenship training, communication skills, ability to work in groups, etc., it is possible that more formal rules are utilized in attempting to direct teachers' actions to the accomplishment of these goals.

At the other extreme, Industrial Arts is viewed as being irrelevant to the child's education by many, even though all students in junior high school must take these courses. Each course in the department is an entity and is not directly related to the student's academic work. A great deal of the work is concrete and manual, with students working on projects or drawings. Here, it is much easier to measure achievement in terms of projects or manual skills. In this case a higher degree of rules is not necessary to guide teachers.

Science departments at this level fall in between and are characterized by a mixed faculty, both abstract and concrete work, and a certain relevance to the other courses that a child is taking. Rules, in this case, are intermediate between high and low.

The findings, therefore, support two of the hypotheses. It had been hypothesized that rules would vary inversely with the routinizability of the activity in which the organization is engaged.

Also, it had been hypothesized that rules would vary inversely with the specificity of goals.

These findings can be accounted for in terms of the functions that rules perform. First, where goals are vague and general, the administration may resort to the directional function of rules. For

example, in the case of the English department, adherence to the prescribed curriculum may be a means of informing teachers what is expected of them in meeting the goals laid down by the school board. In the case of the Industrial Arts departments where goals are more concrete and results are measurable, direction through rules is unnecessary. Professional training and experience may be relied upon to a much greater degree.

Second, where results are not directly measurable as they are in mechanical drawing or metal shop, rules may be used to limit the discretion allowed teachers. If the three departments are compared, the degree of rules appears to be directly related to the degree of abstraction and the generality of goals. Science is midway between the extremes, English and Industrial Arts on both scales.

When English and Science departments are contrasted with the Industrial Arts department on the basis of the number of tenure teachers, a significant difference is evident. Seventy-seven per cent of the English teachers are elected and 73 per cent of the Science teachers are elected. Industrial Arts is much lower with only 57 per cent.

This would indicate that large numbers of teachers in English and Science fulfill all the requirements for election to tenure status, namely, a bachelor's degree, professional requirements, and two years of probationary teaching in Baltimore City schools. Whereas, Industrial Arts teachers usually have quite a different background. Although most of them have taught for more than two years in Baltimore, they lack the academic and professional preparation required of other teachers.

Many of them have been trained through apprentice programs and job experience in their field. Consequently, they come to the secondary schools with a technical background rather than an academic one.

Next, if the level of commitment in terms of experience is examined, major differences are found among the departments. The Science department is lowest with 33% of the teachers scoring high on the commitment index, while the Industrial Arts department is highest, having 79% of the teachers with high scores. The English department falls between the two with 70% of the teachers high on the index. From this it is apparent that the Industrial Arts department is characterized by older, more experienced teachers who tend to remain at a particular school. English departments also have the same basic characteristics--older, more experienced teachers who remain in one school for long periods of time. However, Science departments are much different. There is a much greater turnover among Science teachers. They tend to be less experienced and to move from school to school and out of secondary education to a much greater degree than in the other two departments.

When this finding is coupled with the differences in rules among departments, much of the relationship between rules and commitment scores is explained, since the department with the highest commitment scores has the lowest degree of rules and vice versa. This effect cannot be explained in terms of sex differences among the departments, for when sex is controlled, the partial association between commitment and rules is increased rather than decreased.

Authority conflict scores are also related to subject matter.

Male and female English teachers are much less interested in unions, collective bargaining, and grievance systems than are teachers in other departments. Industrial Arts teachers are highest on this index and evidence the most interest. This has been accounted for earlier in terms of the professional preparation of the two groups, one being academic, the other technical. However, a second factor enters into consideration--exposure to unions. Most Industrial Arts teachers have had firsthand experience with trade unions and their apprentice programs; whereas, teachers prepared in colleges and universities have not. This may then account for the former group's favorable predisposition to unions.

Furthermore, when subject matter is related to both authority conflict scores and to rules scores, much of the relation between these two variables is accounted for. As was discussed earlier in this section, English departments are highest on rules while Industrial Arts departments are lowest. At the same time, English teachers are lowest on the authority conflict index while Industrial Arts teachers are highest. Intrinsic subject matter differences, then, will explain part of the demonstratable association between rules and authority conflict scores.

Finally, when subject matter effects are considered in relation to the goal displacement index, significant differences are found. This time Science teachers are significantly lower on the index, while English teachers fall in the middle, and Industrial Arts teachers are highest on the goal displacement index. It would appear that Industrial Arts teachers have the least interest in new teaching techniques and

curriculum developments. This may be due to the nature of the subject taught as well as to the type of person who is attracted to teaching these subjects. The inclination of Science teachers, on the other hand, to try out new approaches may in part be due to the recent developments in curriculum and techniques.

From these findings it can be concluded that the effect of differences among disciplines is a significant factor, operating as a partial determinant of the degree of rules, the level of competence, the degree of commitment, the amount of authority conflict, and the amount of goal displacement evidenced by teachers. Any future research in the schools must consider the effect of this factor.

No attempt has been made to isolate those characteristics, intrinsic to a particular discipline, which may account for the relationship of that discipline to many of the variables considered in this study. Instead an attempt has been made to suggest a number of differences that might possibly account for these relationships. Some of these factors mentioned in this discussion have been professional training, professional expectations, personality and temperament of members of a department, level of abstraction, skills required, concreteness of goals, importance of the subject and its relation to other subjects, and exposure to unions. Any future research in the schools should consider the effect of subject matter differences and should attempt to factor out those characteristics which are important as determinants of many aspects of the administration of departments and the attitudes of teachers in the secondary schools.

APPENDIX I

First Draft of Questionnaire

Number _____

1. How old are you? _____

2. Are you

Male _____
Female _____Single _____
Married _____

3. What is the name of your school? _____

4. Where is your school located?

Community _____
City _____
State _____

5. What subjects do you teach at what grade levels?

<u>Subjects</u>	<u>Grade</u>
_____	_____
_____	_____
_____	_____

6. Approximately what is the total enrollment in your school?

200 _____
500 _____
1000 _____
1500 _____
2000 _____
2500 _____

7. What is the average number of students that you teach per class?

8. How many classes do you teach?

1 _____
2 _____
3 _____
4 _____
5 _____

9. What is the socioeconomic background of most of your students?

Lower Class _____
 Working Class _____
 Middle Class _____
 Upper Class _____

10. Are the classes that you teach mentally or emotionally retarded?

Below average _____
 Average _____
 Above Average _____
 Other (specify) _____

11. How many years have you been teaching?

First Year _____
 Second Year _____
 Third Year _____
 Fourth Year _____
 Fifth Year _____
 Over Five _____
 Over Ten _____

12. Indicate your academic background.

Bachelor's Degree _____
 Teaching Certificate _____
 Master's Degree (subject field) _____
 Master's Degree (education) _____
 Ph.D. or Ed.D. _____
 Other (specify) _____

13. Have you ever

Published an article _____
 Published several articles _____
 Published a book _____
 Presented a paper at a professional meeting _____
 Other (specify) _____

14. Indicate your overall grade average for your academic work.

A _____
 B _____
 C _____
 D _____

15. How many years have you taught at the present school?

1___ 2___ 3___ 4___ 5___ Over 5___

16. How long do you plan to continue teaching?

1___ 2___ 3___ 4___ 5___ Indefinitely ___

17. Are you currently working toward

Certification

Renewal of your Teaching Certificate

Master's Degree (subject field)

Master's Degree (education)

Ph.D. or Ed.D.

Other (specify) _____

18. Indicate membership and offices held in the following organizations:

	<u>Membership</u>	<u>Offices</u>
NEA		
TABCO		
MSTA		
Teacher's Union		
Phi Delta Kappa		
Faculty Committee		
PTA		
Other (specify) _____		

19. In participating in the professional organizations to which you belong, during the past year have you attended

Every meeting

Most of the meetings

Half of the meetings

Few of the meetings

None of the meetings

20. Do you attend school activities such as athletic competition, science fairs, book fairs, plays, band concerts, etc.?

Frequently

Once in a while

Only when required to attend

21. How often have you been absent from school during the past year?

About once a week _____
 About once a month _____
 Several times a semester _____
 Several times a year _____
 Have never missed a day _____

22. How often do you have occasion to speak to your department chairman, supervisor, or principal about professional matters?

Daily _____
 Weekly _____
 Monthly _____
 Hardly ever _____

23. Who usually initiates these contacts?

I do usually _____
 I do about 50% of the time _____
 They do actually _____

24. Indicate your satisfaction with the following:

	<u>Completely Satisfied</u>	<u>Somewhat Satisfied</u>	<u>Somewhat Dis- satisfied</u>	<u>Completely Dis- satisfied</u>
Support of teachers	_____	_____	_____	_____
Recognition of teachers	_____	_____	_____	_____
Promotion of teachers	_____	_____	_____	_____
Class assignments for teachers	_____	_____	_____	_____
Administrative-teacher relations	_____	_____	_____	_____

25. How frequently are you observed by a supervisor, department chairman, vice principal, principal, etc?

Several times a week _____ Once a month _____
 Once a week _____ Several times a semester _____
 Several times a month _____ Hardly ever _____

26. How frequently do your teachers confer with you about teaching performance, attitudes, progress, etc.?

Several times a week _____
 Once a week _____
 Several times a month _____
 Once a month _____
 Several times a semester _____
 Hardly ever _____

27. Are you a probationary teacher?

Yes _____
 No _____

28. How frequently must you attend probationary meetings?

Weekly _____
 Monthly _____
 Bi-monthly _____
 Several times a semester _____
 Not at all _____

29. During a semester how many of the following persons have occasion to observe and comment on your teaching ability?

Supervisor _____
 Other Supervisor _____
 Department Chairman _____
 Vice-Principal _____
 Principal _____
 Other (specify) _____

30. Regarding supervision, do you feel that your supervisors

Are able to help you to improve your teaching _____
 Once in a while make constructive suggestions _____
 Have little understanding of your work _____
 Frequently dwell upon small details _____
 Are frequently a nuisance _____
 Often cause anxiety _____

31. Indicate those areas of your work in which you have the greatest amount of discretion, and also those areas in which you have the least amount of discretion.

	<u>Greatest</u>	<u>Least</u>
Choice of curriculum	_____	_____
Choice of teaching methods	_____	_____
Choice of textbook	_____	_____
Choice of assignments for students	_____	_____
Grading students	_____	_____
Other (specify)	_____	_____
_____	_____	_____

32. Rank the following goals in order of importance starting with 1 for the least important goal in your class.

To teach students the subject matter of your subject	_____
To teach students the underlying general concepts of your subject	_____
To create an interest in the subject	_____
To teach students how to solve problems	_____
To teach students how to think critically	_____
To help students to be creative	_____
Other (specify) _____	_____

33. Have you had conflicts with any of the following groups?

	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
Administration	_____	_____	_____
Supervisors	_____	_____	_____
Other Faculty	_____	_____	_____
Parents	_____	_____	_____
PTA	_____	_____	_____
Community Groups	_____	_____	_____
Other (specify)	_____	_____	_____
_____	_____	_____	_____

34. Have other teachers had conflicts with any of the following groups?

	<u>Frequently</u>	<u>Occasionally</u>	<u>Never</u>
Administration	_____	_____	_____
Supervisor	_____	_____	_____
Other Faculty	_____	_____	_____
Parents	_____	_____	_____
PTA	_____	_____	_____
Community Groups	_____	_____	_____
Other (specify)	_____	_____	_____
_____	_____	_____	_____

35. In your school are parents allowed to

Contact you directly about students _____
 Required to contact the counselor first _____
 Required to contact the vice-principal or principal first _____

36. Is your school

Public _____ Urban _____ Denominational _____
 Private _____ Suburban _____ Non-denominational _____
 Rural _____

37. If private, what is the yearly tuition? _____

38. If private, what is the primary source of funds for your school?

Tuition _____
 Donations _____
 Endowments _____
 Church or organizational funds _____

39. Are parents or highly respected members of the community active on:

Citizen Study Committees _____
 Curriculum Development Committees _____
 Policy Defining Committees _____
 Influential PTA Committees _____

40. Do you feel that teachers should belong to teacher's unions for purposes of representation to the administration?

Yes _____ No _____

41. Do you feel that teachers should bargain collectively for wages, fringe benefits, class sizes, duties, etc.?

Yes _____ No _____

42. Do you feel that a definite system should be established so that teacher's grievances may be taken up with the administration?

Yes _____ No _____

43. In the future do you feel that teachers salaries, in comparison to administration salaries, should

Remain about the same _____

Be made somewhat closer to administrative salaries _____

Be made comparable to administrative salaries _____

Be raised above administrative salaries _____

44. Do you feel that administrators and teachers should belong to the same or to different professional organizations?

Same _____ Different _____

45. Who should determine the curriculum, books, and teaching methods for a particular class of students?

The teacher himself _____

A committee of teachers _____

A subject matter specialist _____

A committee of teachers and specialists _____

A committee of community leaders _____

A committee of parents _____

Others (specify) _____

46. In general, do you believe that teachers, in comparison to administrators, have

More status _____

Same status _____

Less status _____

47. Have you ever signed a petition to be presented to the administration protesting a decision, policy, or condition, etc.?

Yes _____ No _____

48. Have you ever participated in a group conference with the administration protesting a decision, policy, or condition, etc.?

Yes _____
No _____

49. Generally, in assigning homework, do you

Give the same assignment to every student in the class _____

Give different assignments to each student in the class on the basis of ability or interest _____

Not assign homework _____

50. Generally, in assigning projects, compositions, book reports, etc., do you

Give the same assignment to every student in the class _____

Give different assignments to each student in the class on the basis of ability or interest _____

Not assign projects, compositions, or book reports _____

51. In assigning grades to students, which of the following do you take into consideration (check as many as are applicable) ?

Published norms of National Achievement tests _____

Level of achievement of the classroom _____

School or department norms for achievement tests _____

Student's ability compared to his level of achievement _____

Home problems _____

Participation in athletics _____

Emotional Problems _____

Physical disability _____

Work _____

Other (specify) _____

52. In testing your students, do you generally

Make up different tests for each student _____

Make up different tests for each class _____

Make up the same test for all classes _____

Use tests prepared by the department or division _____

Use nationally standardized tests _____

Other (specify) _____

53. Do you use the same textbook for all of your classes?

Yes _____
No _____

54. Are other textbooks available for use at your request?

Yes _____
No _____

55. Do you hold individual conferences after school with students to help them with problems and academic work?

Daily _____
Weekly _____
Monthly _____
Several times a semester _____

56. Have your students ever entered a science fair, essay contest, reading contest, etc. with your assistance?

Yes _____
No _____

57. Do you usually notify parents and arrange for a conference when a student's work and/or conduct is unsatisfactory?

Always _____
Frequently _____
Only when the problem is acute _____
Only when parents request such a conference _____

58. Do you feel that your students in general are

Most receptive _____
Somewhat interested on certain occasions _____
Usually disinterested _____
Often antagonistic _____

59. How frequently are you called upon to discipline your students for disturbing your class?

Several times daily _____
Once daily _____
Several times weekly _____
Only occasionally _____
Hardly ever _____

60. How many of your students are working on special projects or assignments under your direction?

All
About half
A few
None

61. In preparing a particular lesson for your classes, do you usually

Use several different sources of information
Mainly use the curriculum guide which has been prepared
Mainly use the textbook for the course
Make up the lesson without using any of the above

62. Indicate which of the following teaching techniques that you usually use for your classes

	<u>Always</u>	<u>Frequently</u>	<u>Infrequently</u>	<u>Never</u>
Lecture	_____	_____	_____	_____
Demonstration	_____	_____	_____	_____
Laboratory	_____	_____	_____	_____
Experiment	_____	_____	_____	_____
Seminar discussion	_____	_____	_____	_____
Student reports	_____	_____	_____	_____
Class debates	_____	_____	_____	_____
Films or slides	_____	_____	_____	_____
Recordings	_____	_____	_____	_____
Field trips	_____	_____	_____	_____
Projects	_____	_____	_____	_____
Other (specify)	_____	_____	_____	_____
_____	_____	_____	_____	_____

63. Are you in favor of adopting the new chemistry, biology, or mathematics program in your school?

Is already used
In favor of adoption
Not in favor of adoption

64. Are you in favor of adopting a new creative writing program, economics program, or new social studies program in your school?

Already in use _____

In favor of adoption _____

Not in favor of adoption _____

65. Are you in favor of using teaching machines if they are available for your subject?

In favor of adoption _____

Would like to examine and test them first _____

Not in favor of adoption _____

66. Are you in favor of participating in team teaching if given the opportunity to do so?

Yes _____

No _____

67. Are you in favor of using educational television in teaching your subject?

Yes _____

No _____

68. Are you in favor of adopting a merit pay plan for teachers in your school?

Yes _____

No _____

69. Do you usually require students to return poor work so that you may refer to their work in conferences with parents and the principal?

Yes _____

No _____

70. When controversial subjects are referred to in class or in the textbook, do you usually

Discuss the subject allowing everyone to state an opinion including yourself _____

Discuss the subject allowing everyone to state an opinion but remain neutral yourself _____

Discuss the subject after securing approval from the department chairman, supervisor, or principal _____

Not discuss the subject with the students _____

71. When you know that you are to be observed by one of your superiors, do you usually

Continue with the regular lesson that you had planned

Prepare a special lesson plan

Insure that you can tie in the lesson with the curriculum guide

72. Ordinarily do you

Arrive at school before the required time

Arrive about on time

Leave promptly at the specified departure time

Remain somewhat after the specified departure time

73. Do you feel that a teacher must be careful about what he says in class and the type of work that he assigns to students because of possible pressure from

Yes

No

Administration

PTA

Parents

Law suits

Community Groups

Other (specify) _____

74. Do you feel that if you were to fail more than a few students in each of your classes you

Might be called upon to justify your actions

Might have your grades changed by the principal

Might come under attack from the PTA, parents, etc.

This problem would not arise

75. In disciplining students by keeping them after school repeatedly or by assigning a heavy work penalty often, do you feel that you

Might be called upon to justify your actions by the principal

Might be reprimanded by the vice principal or principal

Might come under attack from the PTA, parents, etc.

This problem would not arise

76. Before assigning projects, term papers, or planning a field trip, do you ordinarily
- Secure approval _____
- Ascertain whether the curriculum guide includes these activities _____
- Assign the project, paper, or plan the field trip at your own discretion _____
77. In deciding whether or not to fail borderline cases do you usually
- Talk it over with the supervisor, department chairman, vice principal, or principal _____
- Find out whether other teachers plan to fail the student _____
- Decide on the basis of his work as compared to the other students _____
78. In handling discipline cases, do you refer the student to the counselor, vice principal, or principal
- Each time you have trouble with the student _____
- Frequently when you have more trouble than usual with the student _____
- Never refer the student to the office _____
79. If a class is difficult to handle, do you ask the vice principal or principal to speak to them
- Frequently _____
- Once in a while _____
- Never _____
80. When parents question your grading or disciplining of their child, do you refer them to the counselor, vice principal or principal
- Frequently _____
- Once in a while _____
- Never _____
81. In the future do you plan to
- Continue teaching _____
- Become a guidance counselor _____
- Become an administrator _____
- Other (specify) _____

82. A. Check the policy regarding the preparation of Lesson Plans which is most applicable to your school.

- 1) The individual teacher may prepare an informal lesson plan as he sees fit. _____
- 2) The teacher is to prepare a lesson plan which may be inspected upon occasion by the department chairman, supervisor, or principal. _____
- 3) The teacher is to prepare a lesson plan according to a certain prescribed format and to have it available for inspection upon request. _____
- 4) The teacher is expected to have a copy of his current lesson plan in a folder in his desk or in the departmental office at all times. _____
- 5) The teacher is to have copies of his lesson plans for several days or a week ahead of time in his desk or in the departmental office at all times. _____
- 6) Other (specify) _____

B. Is this procedure

Written _____

Not written but generally understood _____

Not generally understood _____

C. Is this procedure applicable to

Student teachers _____

New teachers _____

All teachers _____

D. In your estimation, do teachers adhere to this policy

All of the time _____

Most of the time _____

Part of the time _____

Hardly ever _____

E. Is this procedure

Always enforced _____

Usually enforced _____

Partially enforced _____

Hardly ever enforced _____

F. Is there a prescribed or generally known penalty for violating this procedure?

None _____

Reprimand from a superior _____

Withholding of paycheck _____

Other (specify) _____

82. G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____

No _____

Explain _____

H. Do you feel that this procedure is

Fair _____

Doesn't matter _____

Unfair _____

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

83. A. Check the policy regarding Curriculum which is most applicable to your school.

- 1) The individual teacher decided what is to be included in the curriculum for the classes he teaches. _____
- 2) There is a general curriculum guide for the subject and grade, but the teacher may select those topics that he wishes to emphasize in any order that he prefers. _____
- 3) There is a general curriculum guide for the subject and grade which the teacher must follow, but he may develop each topic as he wishes. _____
- 4) There is a general curriculum guide for each subject and grade in which each topic is sub-divided into general lessons which the teacher is expected to follow. _____
- 5) There is a general curriculum guide for the subject and grade, topics are subdivided into general lessons, and teaching methods, projects, and assignments are outlined, which the teacher is expected to follow. _____
- 6) Other (specify) _____

B. Is this procedure

Written _____

Not written but generally understood _____

Not generally understood _____

83. C. Is this procedure applicable to

Student teachers _____
 New teachers _____
 All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____
 Most of the time _____
 Part of the time _____
 Hardly ever _____

E. Is this procedure

Always enforced _____
 Usually enforced _____
 Partially enforced _____
 Hardly ever enforced _____

F. Is there a prescribed or generally known penalty for violating this procedure?

None _____
 Reprimand from a superior _____
 Withholding of paycheck _____
 Other (specify) _____

G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____
 No _____
 Explain _____

H. Do you feel that this procedure is

Fair _____
 Doesn't matter _____
 Unfair _____

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

84. A. Check the policy regarding the Selection of Textbooks for a class which is most applicable to your school.

- 1) The individual teacher may select any text which he feels is suitable for his class.
- 2) The teacher may select the textbook which he feels is best for his classes from several texts pre-selected by the administrative officials, department chairman, etc.
- 3) The teacher may select the textbook which he feels is best for his classes from several texts pre-selected by administrative officials, department chairman, etc., but must secure approval of his selection from his department chairman, supervisor, or principal.
- 4) The teacher is assigned a textbook for his classes but may supplement this textbook with others if he wishes.
- 5) The teacher is assigned a textbook for his classes which he is to use. _____
- 6) Other (specify) _____

B. Is this procedure

Written _____
 Not written but generally understood _____
 Not generally understood _____

C. Is this procedure applicable to

Student teachers _____
 New teachers _____
 All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____
 Most of the time _____
 Part of the time _____
 Hardly ever _____

E. Is this procedure

Always enforced _____
 Usually enforced _____
 Partially enforced _____
 Hardly ever enforced _____

84. F. Is there a prescribed or generally known penalty for violating this procedure?

None _____

Reprimand from a superior _____

Withholding of paycheck _____

Other (specify) _____

- G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____

No _____

Explain _____

- H. Do you feel that this procedure is

Fair _____

Doesn't matter _____

Unfair _____

- I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

85. A. Check the policy regarding the discussion of Controversial Topics (e.g., Politics, Communism, Religion, Sex, etc.) which is most applicable to your school.

- 1) The individual teacher is the judge of whether or not a controversial subject is to be discussed in class and may give his own opinion concerning the subject. _____
- 2) The individual teacher is the judge of whether or not a controversial subject is to be discussed in class, but is to remain neutral and is not to state his own opinion. _____
- 3) Controversial subjects may be discussed in class but the teacher is to follow a definite procedure in handling the discussion. _____
- 4) Controversial subjects may be discussed in class but the teacher is expected to ask permission from his department chairman, supervisor, or principal beforehand. _____
- 5) Controversial subjects may be discussed in class only if the curriculum guide includes them or the subject matter specialists request their inclusion in the curriculum. _____
- 6) Other (specify) _____

85. B. Is this procedure

Written

Not written but generally understood ☐Not generally understood ☐

C. Is this procedure applicable to

Student teachers ☐New teachers ☐All teachers ☐

D. In your estimation do teachers adhere to this policy

All of the time ☐Most of the time ☐Part of the time ☐Hardly ever ☐

E. Is this procedure

Always enforced ☐Usually enforced ☐Partially enforced ☐Hardly ever enforced ☐

F. Is there a prescribed or generally known penalty for violating this procedure?

None

Reprimand from a superior ☐Withholding of paycheck ☐Other (specify) ☐

G. Have you ever been reprimanded or penalized for violating this procedure?

Yes ☐No ☐Explain

H. Do you feel that this procedure is

Fair ☐Doesn't matter ☐Unfair ☐

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐

86. A. Check the policy regarding the Grading of Students which is most applicable to your school.

- 1) The individual teacher may grade his students according to any standard that he wishes.
- 2) There is to be a general standard to be used by teachers in grading students (e.g., a grade is to be based 50% on test scores, 20% on homework, 20% on projects or assignments, 10% on teacher evaluation of effort.).
- 3) There is a definite policy about how low a grade a teacher may give, passing or failing students, distribution of grades, etc.
- 4) Teachers are expected to assign grades to students which are then reviewed by the counselor, department chairman, supervisor, or principal who may ask the teacher to justify certain grades.
- 5) Teachers are expected to assign grades to students which are then reviewed by the counselor, department chairman, supervisor, or principal who may change the grades if they are too low or if there are mitigating circumstances.
- 6) Other (specify) _____

B. Is this procedure

Written

Not written but generally understood _____

Not generally understood _____

C. Is this procedure applicable to

Student teachers _____

New teachers _____

All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____

Most of the time _____

Part of the time _____

Hardly ever _____

E. Is this procedure

Always enforced _____

Usually enforced _____

Partially enforced _____

Hardly ever enforced _____

86. F. Is there a prescribed or generally known penalty for violating this procedure?

None _____

Reprimand from a superior _____

Withholding of paycheck _____

Other (specify) _____

- G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____

No _____

Explain _____

- H. Do you feel that this procedure is

Fair _____

Doesn't matter _____

Unfair _____

- I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

87. A. Check the policy regarding the Disciplining of Students which is most applicable to your school.

- 1) Teachers may punish students in any way they see fit. (e.g., whipping, keeping after school, making him stand in the corner, giving him extra assignments, etc.) _____
- 2) Teachers may generally punish students as they see fit but may not administer corporal punishment. _____
- 3) There are certain prescribed procedures teachers adhere to in punishing students. _____
- 4) Teachers may only punish a student by keeping him after school, giving him extra assignments, etc., after securing approval from his department chairman, supervisor or principal. _____
- 5) Teachers may not punish students themselves but must refer acute problems to the department chairman, vice-principal, or principal. _____
- 6) Other (specify) _____

- B. Is this procedure

Written _____

Not written but generally understood _____

Not generally understood _____

87. C. Is this procedure applicable to

Student teachers _____
 New teachers _____
 All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____
 Most of the time _____
 Part of the time _____
 Hardly ever _____

E. Is this procedure

Always enforced _____
 Usually enforced _____
 Partially enforced _____
 Hardly ever enforced _____

F. Is there a prescribed or generally known penalty for violating this procedure?

None _____
 Reprimand from a superior _____
 Withholding of paycheck _____
 Other (specify) _____

G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____
 No _____
 Explain _____

H. Do you feel that this procedure is

Fair _____
 Doesn't matter _____
 Unfair _____

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

88. A. Check the policy regarding the Arrival and Departure of teachers from school which is most applicable to your school.

- 1) Teachers may arrive at and depart from school at any time as long as they are present for their duties. _____
- 2) There is a certain arrival time for teachers but they may leave when their duties are completed for the day. _____
- 3) There is a certain arrival time and departure time for teachers each day. _____
- 4) There is a certain arrival time and departure time for teachers each day, and teachers must secure approval if they expect to arrive late or leave early on a particular day. _____
- 5) There is a certain arrival time and departure time for teachers each day, and teachers must secure approval if they expect to arrive late, leave the school for any reason during the day, and leave early. _____
- 6) Other (specify) _____

B. Is this procedure

Written _____

Not written but generally understood _____

Not generally understood _____

C. Is this procedure applicable to

Student teachers _____

New teachers _____

All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____

Most of the time _____

Part of the time _____

Hardly ever _____

E. Is this procedure

Always enforced _____

Usually enforced _____

Partially enforced _____

Hardly ever enforced _____

88. F. Is there a prescribed or generally known penalty for violating this procedure?

None

Reprimand from a superior _____

Withholding of paycheck _____

Other (specify) _____

- G. Have you ever been reprimanded or penalized for violating this procedure?

Yes _____

No _____

Explain _____

- H. Do you feel that this procedure is

Fair _____

Doesn't matter _____

Unfair _____

- I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

89. A. Check the policy regarding the Discussion of Curriculum, Supervision, Administrative Policies, etc., by teachers which is most applicable to your school.

- 1) Teachers are generally encouraged to discuss curriculum, supervision, and administrative policies among themselves and with administrative personnel. _____
- 2) Teachers are permitted to discuss curriculum, supervision, and administrative policies among themselves. _____
- 3) Teachers are permitted to discuss curriculum, supervision, and administrative policies among themselves, but it is not advisable to criticize or question. _____
- 4) Teachers are discouraged from discussing, questioning, or criticizing curriculum, supervision, or administrative policies. _____
- 5) Teachers who question or criticize curriculum, supervision, or administrative policies are likely to be reprimanded. _____
- 6) Other (specify) _____

89. B. Is this procedure

Written

Not written but generally understood

Not generally understood

C. Is this procedure applicable to

Student teachers

New teachers

All teachers

D. In your estimation do teachers adhere to this policy

All of the time

Most of the time

Part of the time

Hardly ever

E. Is this procedure

Always enforced

Usually enforced

Partially enforced

Hardly ever enforced

F. Is there a prescribed or generally known penalty for violating this procedure?

None

Reprimand from a superior

Withholding of paycheck

Other (specify)

G. Have you ever been reprimanded or penalized for violating this procedure?

Yes

No

Explain

H. Do you feel that this procedure is

Fair

Doesn't matter

Unfair

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

90. A. Check the policy regarding the Employment of Teachers Outside of the School which is most applicable to your school.

- 1) There are no restrictions on outside employment for teachers as long as it does not interfere with their teaching.
- 2) Teachers are allowed to hold outside jobs but are discouraged from holding certain types of jobs, such as bartender, liquor salesman, cigarette salesman, etc.
- 3) Teachers are allowed to hold outside employment, but the job must be approved by the school board or an administrative official.
- 4) Teachers are limited to a certain number of hours of outside employment.
- 5) Teachers are not allowed to hold outside employment during the school year.
- 6) Other (specify) _____

B. Is this procedure

Written _____
 Not written but generally understood _____
 Not generally understood _____

C. Is this procedure applicable to

Student teachers _____
 New teachers _____
 All teachers _____

D. In your estimation do teachers adhere to this policy

All of the time _____
 Most of the time _____
 Part of the time _____
 Hardly ever _____

E. Is this procedure

Always enforced _____
 Usually enforced _____
 Partially enforced _____
 Hardly ever enforced _____

90. F. Is there a prescribed or generally known penalty for violating this procedure?

None

Reprimand from a superior

Withholding of paycheck

Other (specify)

G. Have you ever been reprimanded or penalized for violating this procedure?

Yes

No

Explain

H. Do you feel that this procedure is

Fair

Doesn't matter

Unfair

I. Which of the procedures listed above would you prefer to have adopted in your school?

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

APPENDIX II

Final Questionnaire

INSTRUCTIONS

This study is being conducted as part of a doctoral dissertation by a graduate student in the Department of Education at the Johns Hopkins University. Its purpose is to examine the organizational structure of the junior high school by determining departmental and teacher procedures and opinions. We hope to study how these procedures and opinions vary from department to department and from school to school.

You have been selected randomly from a list of all of the teachers in your department and are being asked to fill out this questionnaire. If the data is to be accurate, it is essential that you answer all of the questions as accurately as possible. Questions are to be answered by circling the number of the answer that is most applicable in your case. If none of the answers provided are appropriate, please write in your own answer. Please answer the questions only in terms of your own experiences and opinions and not in terms of what other teachers in the department think or do. Please comment in the margin on any question or answer that you feel needs clarification.

The information that you provide is strictly confidential and will be seen only by myself. Furthermore, once this information has been transferred to IBM cards, there will be no way in which you may be identified.

Thank you very much for your cooperation.

James G. Anderson
Department of Education
Johns Hopkins University

Background Information

1. Name of School _____

2. Are you 1) Male _____
2) Female _____

3. What is the approximate enrollment of the school?

- 1) Under 200
- 2) 200 - 499
- 3) 500 - 999
- 4) 1000 - 1499
- 5) 1500 - 1999
- 6) 2000 - 2499
- 7) 2500 - 2999
- 8) 3000 - or more

4. For each section taught, indicate the subject taught, grade level (7th, 8th, etc.), ability (accelerated, above average, average, below average, handicapped), number of students in the class, and type of program (college preparatory, commercial, etc.).

<u>Subject</u>	<u>Grade Level</u>	<u>Ability</u>	<u>Class</u>	<u>Size</u>	<u>Type of Program</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

5. Indicate the socioeconomic status of most of the students.

- 1) Lower - Lower Class
- 2) Upper - Lower Class
- 3) Lower - Middle Class
- 4) Upper - Middle Class
- 5) Lower - Upper Class
- 6) Upper - Upper Class

6. Indicate the total number of years that you will have been teaching by the end of the present year.

- 1) One
2) Two
3) Three
4) Four
5) Five
6) Over five

7. Indicate the number of years that you will have been teaching at the present school by the end of the current year.

- 1) One
2) Two
3) Three
4) Four
5) Five
6) Over five

8. Are you

- 1) Elected
- 2) Not elected
- 3) Special substitute
- 4) Student teacher
- 5) Other (specify)

9. List all of the extra curricular activities to which you are assigned as coach, adviser, or sponsor. Also include all faculty assignments, such as, committees, study groups, etc.

[illegible]

10. Indicate your academic preparation and the type of institution in which it was obtained (e.g., State Teacher's College - STC; Liberal Arts College - LA; State University - SU; Private University - PU). Also indicate any current academic work in which you are engaged.

	<u>Institution</u>	<u>Field</u>	<u>Completed</u>	<u>Working Toward</u>
Bachelor's Degree	_____	_____	1	1
Teaching Certificate	_____	_____	2	2
Master's Degree (Education)	_____	_____	3	3
Certificate of Advanced Studies	_____	_____	4	4
Master's Degree (Subject Field)	_____	_____	5	5
Ph.D. or Ed.D.	_____	_____	6	6
Other (specify)	_____	_____	7	7

Teacher's Attitudes, Opinions, and Procedures

1. What is your department? _____
2. List the professional educational associations to which you belong. For each indicate the percentage of their meetings that you attend during the year and any offices that you have held.

<u>Organization</u>	<u>Attendance</u>	<u>Office Held</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Indicate your attendance at each of the following school functions during the last year.

	<u>Never</u>	<u>Occasionally</u>	<u>Half the Time</u>	<u>Frequently</u>	<u>Always</u>
Athletic Competition	1	2	3	4	5
Science Fairs	1	2	3	4	5
Book Fairs	1	2	3	4	5
Plays	1	2	3	4	5

3. (Continued)

	<u>Never</u>	<u>Occasionally</u>	<u>Half the Time</u>	<u>Frequently</u>	<u>Always</u>
Band Concerts	1	2	3	4	5
Student Govern- ment Activities	1	2	3	4	5
Other (specify) _____	1	2	3	4	5

4. Indicate your plans for the next five years.

- 1) Do not plan to continue teaching
- 2) Plan to teach at the college level
- 3) Plan to go into high school counseling
- 4) Plan to go into high school administration
- 5) Plan to continue teaching in high school but would prefer another school
- 6) Plan to continue teaching in the present high school
- 7) Other (specify) _____

5. Indicate your satisfaction with the following aspects of your school:

	<u>Satisfied</u>	<u>Usually Satisfied</u>	<u>Dis-satisfied</u>
Administrative Backing for Teachers	1	2	3
Administrative Recogni- tion of Teachers	1	2	3
Class Assignments for Teachers	1	2	3
Transfer of Teachers upon Request	1	2	3
Faculty Dining Room Provisions	1	2	3
Other (specify) _____	1	2	3

6. With regard to supervision, do you feel that your supervisors

- 1) Have helped you to improve your teaching
- 2) Occasionally have made constructive suggestions
- 3) Have had little understanding of your work
- 4) Other (specify) _____

7. Do you feel that teachers should bargain collectively for wages, fringe benefits, class size, duties, etc.?
- 1) No
 - 2) Undecided
 - 3) Yes
8. Do you feel that teachers should belong to a union so that their views may be made known to the administration?
- 1) No
 - 2) Undecided
 - 3) Yes
9. Do you feel that a definite procedure should be established so that teachers with complaints may discuss them with administrative officials of the school and the school district?
- 1) Not necessary
 - 2) Undecided
 - 3) Necessary
 - 4) Such a procedure already exists
10. In the future do you feel that
- 1) Administrative salaries should be raised before teachers salaries are raised.
 - 2) Administrative salaries and teachers salaries should be raised at the same time.
 - 3) Teachers salaries should be raised before administrative salaries are raised.
 - 4) Other (specify) _____
11. Do you feel that teachers and administrators should belong to the same or to different professional organizations?
- 1) Same
 - 2) Undecided
 - 3) Different
12. During the past year have you had serious disagreements with any of the following:

	<u>Never</u>	<u>Once or Twice</u>	<u>More than Twice</u>
Principal	1	2	3
Vice Principal	1	2	3
Department Chairman	1	2	3

12. (Continued)

	<u>Never</u>	<u>Once or Twice</u>	<u>More than Twice</u>
Supervisor	1	2	3
Other Faculty	1	2	3
Parents	1	2	3
P. T. A.	1	2	3
Community Groups	1	2	3
Other (specify) _____	1	2	3

13. Generally in assigning homework, do you

- 1) Allow each student to choose his own homework assignment.
- 2) Assign different homework to groups within each section on the basis of interest or ability.
- 3) Assign the same homework to everyone in a section but make different assignments to other sections of the same subject.
- 4) Assign the same homework to all sections of the same subject but suggest optional or extra credit assignments for those students who are interested.
- 5) Assign the same homework to all sections of the same subject.
- 6) Other (specify) _____

14. Generally in assigning projects, term papers, reports, or literary research, do you

- 1) Allow each student to choose his own project or topic.
- 2) Assign different projects or topics to groups within each section on the basis of interest or ability.
- 3) Assign the same project or topic to everyone in a section but make different assignments to other sections of the same subject.
- 4) Assign the same project or topic to everyone in all sections of the same subject but suggest optional or extra credit assignments for interested students.
- 5) Assign the same project or topic to all sections of the same subject.
- 6) Other (specify) _____

15. In testing students, do you generally

- 1) Make up several tests for use within one class.
- 2) Make up different tests for sections of the same subject on the basis of ability.
- 3) Make up the same test for all sections of the same subject but provide extra-credit problems or questions.
- 4) Use tests prepared by the department or by specialists.
- 5) Use nationally standardized tests.
- 6) Other (specify) _____

16. In using textbooks for your classes, do you
- 1) Assign outside readings in the library on the topic that you are discussing .
 - 2) Make several different texts or books available for student use in your class.
 - 3) From time to time supplement the textbook that you are using with additional readings from other books.
 - 4) Use different textbooks for sections of the same subject based on their ability.
 - 5) Use the same textbook for all sections of the same subject.
 - 6) Other (specify) _____
17. Do you hold conferences after school with students to help them with problems and with their academic work?
- 1) Yes, whenever I feel that the student needs help.
 - 2) Yes, I encourage them to come after school several days a week.
 - 3) Yes, whenever students request help.
 - 4) Yes, when tutoring sessions are scheduled.
 - 5) No, not unless I feel that it is absolutely necessary.
 - 6) Other (specify) _____
18. When a student's work or conduct is unsatisfactory, do you usually
- 1) Arrange for a conference with the parents.
 - 2) Call the parents and discuss it with them.
 - 3) Send a notice or letter to the parents advising them of the problem.
 - 4) Notify the principal or vice-principal and let him decide on what action to take if the problem is acute.
 - 5) Wait until report cards are sent home and indicate the student's unsatisfactory work.
 - 6) Other (specify) _____
19. With respect to science fairs, essay contests, reading contests, or foreign language contests, do you generally
- 1) Assist most of your students to enter and prepare for these contests.
 - 2) Assist those students who are interested to enter and prepare for these contests.
 - 3) Assist any student who is interested to enter but let him prepare for the contest himself.

19. (Continued)

- 4) Call the contest to the attention of the students but let them enter and prepare for the contest themselves.
 5) Usually do not bother to announce these contests as there is little interest among the students.
 6) Other (specify) _____

20. Indicate the extent to which you consider the following factors in assigning a grade to a student in your class.

	<u>Not Consi- dered</u>	<u>Considered Borderline Case</u>	<u>A Partial Factor</u>	<u>One of the Major Factors</u>	<u>The Major Factor</u>
His test average com- pared to the Norms School's passing grade 1		2	3	4	5
Norms of National Achievement Tests	1	2	3	4	5
School or Depart- ment Norms for Achievement Tests	1	2	3	4	5
The average level of his classmates.	1	2	3	4	5
His achievement compared to his ability	1	2	3	4	5
Home problems	1	2	3	4	5
Emotional problems	1	2	3	4	5
Physical disability	1	2	3	4	5
Work after school	1	2	3	4	5
Participation in extra-curricular activities	1	2	3	4	5
Other (specify) _____	1	2	3	4	5

21. In preparing a lesson plan for your classes, do you usually

- 1) Use several outside sources of information.
- 2) Use the textbook for the class supplemented with additional information.
- 3) Use the curriculum guide for the course.
- 4) Other (specify) _____

22. Indicate how often during the semester you use the following techniques in teaching:

	<u>Not at All</u>	<u>Several Times a Semester</u>	<u>Several Times a Month</u>	<u>Several Times a Week</u>
Lecture	1	2	3	4
Demonstration	1	2	3	4
Experiment	1	2	3	4
Class Discussion	1	2	3	4
Student Reports	1	2	3	4
Debates	1	2	3	4
Films and Slides	1	2	3	4
Recordings	1	2	3	4
Field Trips	1	2	3	4
Student Projects	1	2	3	4
Oral Recitations	1	2	3	4
Drill	1	2	3	4
Working at the Board	1	2	3	4
Team Competition	1	2	3	4
Reading in Class	1	2	3	4
Guest Lecturer	1	2	3	4
Individual Library Work	1	2	3	4
Other (specify) _____	1	2	3	4

23. If you teach one of the following subjects, indicate whether or not you would be in favor of adopting the Chemical Bond or Chem Study Program, BSCS Biology, or PSCS Physics in your department.

- 1) In favor of adoption
- 2) Undecided
- 3) Not in favor of adoption
- 4) Already in use in my school

24. If you teach English, indicate whether or not you would be in favor of adopting a Creative Writing Program and Structural Linguistics in your department.
- 1) In favor of adoption
 - 2) Undecided
 - 3) Not in favor of adoption
 - 4) Already in use in my school
25. If you teach Industrial Arts, indicate whether or not you would be in favor of adopting programs of Horticulture and Cosmetology in your department.
- 1) Yes
 - 2) Undecided
 - 3) No
26. Are you in favor of using teaching machines as an aid if programs are available for your subject?
- 1) Yes
 - 2) Undecided
 - 3) No
27. Are you in favor of participating in team teaching if given the opportunity to do so?
- 1) Yes
 - 2) Undecided
 - 3) No
28. Are you in favor of using educational television as an aid to your teaching?
- 1) Yes
 - 2) Undecided
 - 3) No
29. Are you in favor of adopting a merit pay plan for teachers?
- 1) Yes
 - 2) Undecided
 - 3) No

Departmental Procedures

1. Name of School _____
2. Name of the Department _____
3. Check the procedure regarding the preparation of Lesson Plans which is most applicable to your department.
 - 1) The individual teacher may or may not prepare an informal or formal lesson plan as he sees fit. However, one lesson plan is to be available for use by a substitute teacher.
 - 2) The teacher is to prepare a lesson plan which may be inspected upon occasion by the department chairman, supervisor, or principal.
 - 3) The teacher is to prepare a lesson plan according to a certain prescribed format and to have them available for inspection upon request.
 - 4) The teacher is expected to have a copy of his current lesson plan in a folder in his desk or in the departmental office at all times.
 - 5) The teacher is to have copies of his lesson plan for several days or a week ahead of time in his desk or in the departmental office at all times.
 - 6) Other (specify) _____

Comments: _____

4. Check the procedure regarding Curriculum which is most applicable to your department.
 - 1) The individual teacher decides what is to be included in the curriculum for the classes he teaches.
 - 2) There is a general curriculum guide for the subject and grade, but the teacher may select those topics that he wishes to emphasize in any order that he prefers.
 - 3) There is a general curriculum guide for the subject and grade which the teacher must follow, but he may develop each topic as he wishes.
 - 4) There is a general curriculum guide for each subject and grade in which each topic is sub-divided into general lessons which the teacher is expected to follow.
 - 5) There is a general curriculum guide for the subject and grade, topics are subdivided into general lesson plans, and teaching methods, projects, and assignments are outlined which the teacher is expected to follow.

4. (Continued)

6) Other (specify) _____

Comments: _____

_____5. Check the procedure regarding the Selection of Textbooks for a class which is most applicable to your department.

- 1) The individual teacher may select any text which he feels is suitable for his class.
- 2) The teacher may select the textbook which he feels is best for his classes from several texts preselected by the administration, department chairman, etc.
- 3) The teacher may select the textbook which he feels is best for his class from several texts preselected by the administration, department chairman, etc., but must secure approval from his department chairman or supervisor for his selection.
- 4) The teacher is assigned a textbook for his classes, but may supplement this textbook with others if he wishes.
- 5) The teacher is assigned a textbook for his classes, which he is to use.
- 6) Other (specify) _____

Comments: _____

_____6. Check the procedure regarding the discussion of Controversial Topics (e.g., nuclear testing, politics, religion, sex, evolution, etc.) which is most applicable to your department.

- 1) The individual teacher is the judge of whether or not a controversial topic is to be discussed in class and may state his own opinion concerning the subject.
- 2) The individual teacher is the judge of whether or not a controversial topic is to be discussed in class, but is to remain neutral and is not to state his own opinion.
- 3) Controversial topics are to be discussed in class, but the teacher is to follow a definite procedure in handling the discussion.
- 4) Controversial topics may be discussed in class but the teacher is expected to secure approval from his department chairman first.

6. (Continued)

- 5) Controversial topics may be discussed in class only if they are included in the curriculum guide.
- 6) Other (specify) _____

Comments: _____

7. Check the procedure regarding the Grading of Students which is most applicable to your department.

- 1) The individual teacher may grade his students according to any standard that he wishes.
- 2) There is to be a general standard used by teachers in grading students (e.g., A grade is to be based 50% on test scores, 20% on homework, 20% on assignments, and 10% on teacher evaluation of effort.).
- 3) There is a definite policy about how low a grade a teacher may give, passing or failing of students, distribution of grades, etc.
- 4) Teachers are expected to assign grades to students, which are then reviewed by the counselor, department chairman or principal who may ask the teacher to justify certain grades.
- 5) Teachers are expected to assign grades to students which are then reviewed by the counselor, department chairman, or principal who may change the grades if they are too low or if there are mitigating circumstances.
- 6) Other (specify) _____

Comments: _____

8. Check the procedure regarding Work Assignments for Students which is most applicable to your department.

- 1) Teachers may make any assignment that they wish in their classes.
- 2) Teachers may make any assignment that they wish to students, but the length of time required to complete the assignment must not exceed a certain limit.
- 3) There are general types of assignments which the teacher may choose from for his students.

8. (Continued)

- 4) Before a student project or library research projects are assigned, the teacher is to secure approval from his department chairman or supervisor.
- 5) There is a detailed list of assignments that the teacher may make to students.
- 6) Other (specify) _____

Comments: _____

9. Check the procedure regarding the Supervision of Teachers which is most applicable to your department.

- 1) Teachers are never observed or supervised in the classroom by administrative personnel.
- 2) Teachers are observed in class only when they request someone to do so or when administrative personnel request an invitation.
- 3) Several times a semester a subject matter specialist observes a lesson and discusses it with the teacher.
- 4) Several times a semester a subject matter specialist, the principal, the department chairman, or the vice-principal observes a lesson and discusses it with the teacher.
- 5) During the semester observations are held regularly by the subject matter specialist, principal, vice-principal, and/or department chairman followed by a conference with the teacher.
- 6) Other (specify) _____

Comments: _____

10. Check the procedure regarding the Testing of Students which is most applicable to your department.

- 1) Teachers prepare and administer their own quizzes, tests, and final examinations.
- 2) Teachers prepare and administer their own quizzes, tests, and final examinations which are occasionally looked at by a supervisor or department chairman.

10. (Continued)

- 3) Teachers prepare their own quizzes, tests, and final examinations. Quarter or semester examinations are submitted to the department for approval.
- 4) Teachers are expected to submit tests and final examinations to the department for approval.
- 5) Tests and examinations are prepared by the department and administered by the teachers.
- 6) Other (specify) _____

Comments: _____

11. Rate each teacher in your department or under your supervision on a five point scale (1, lowest, to 5, highest) on the basis of your judgment of his professionalism as defined by:

- 1) Participating in professional associations.
- 2) Willing participation in curricular and extra-curricular school activities.
- 3) Continuing effort to update and improve knowledge of the field in which he teaches.

Teacher's
Number

Teacher's
Rating

12. Rate each teacher in your department or under your supervision on the three point scale (1, lowest, to 3, highest) on the basis of your judgment as to how cooperative and satisfied he is in his work within the department and the school. In your rating of each teacher consider the following factors:

- 1) How receptive he is to suggestions as to ways in which he might improve his teaching, grading, discipline, etc.
- 2) How well he cooperates in carrying out administrative procedures, school policies, extracurricular assignments, etc.
- 3) How satisfied he is with class assignments, extra-curricular assignments, faculty facilities, and school policies in general.

Teacher's
Number

Teacher's
Rating

13. Rate each teacher in your department or under your supervision on the five point scale (1, lowest, to 5, highest) on the basis of the degree of individual attention that he gives to the students in his classes. In your rating of each teacher consider the following factors:

- 1) Whether or not he frequently assigns individual home assignments and projects to students.
- 2) Whether or not he grades each student on an individual basis.
- 3) How often he works with individual students or groups of students after school.
- 4) Whether or not he frequently encourages and provides for individual study and reading among students.

Teacher's
Number

Teacher's
Rating

14. Rate each teacher in your department or under your supervision on a three point scale (1, lowest, to 3, highest) on the basis of your estimate as to how adaptable and imaginative he is in his teaching. In your rating of each teacher consider the following factors:

- 1) The variety of teaching techniques that he uses during the semester.
- 2) His interest in new textbooks and new curriculum, such as, PSCS Physics, Structural Linguistics, Electronics, etc.
- 3) His interest in new teaching techniques, such as, educational television, teaching machines, team teaching, etc.

Teacher's
Number

Teacher's
Rating

APPENDIX III

Junior High Schools

Baltimore City Public Schools

<u>Junior High School Number</u>	<u>Student Enrollment</u>	<u>Socioeconomic Level</u>	<u>Type of School</u>
3	151	Lower-Lower	Mentally Retarded
9	244	Lower-Lower	Mentally Retarded
41*	1341	Middle	Comprehensive
42	1729	Middle	Comprehensive
43	2570	Upper-Lower	Comprehensive
46	1857	Middle	Comprehensive
49	393	Lower-Lower	Comprehensive
55	90	Lower-Lower	Mentally Retarded
56*	365	Lower-Lower	Comprehensive
57	2042	Lower-Lower	Comprehensive
72	901	Lower-Lower	Comprehensive
75	2270	Upper-Lower	Comprehensive
76	772	Upper-Lower	Comprehensive
77*	2296	Upper-Lower	Comprehensive
78	1865	Upper-Lower	Comprehensive
79	2103	Middle	Comprehensive
80	848	Middle	Comprehensive
90*	2196	Upper-Lower	Comprehensive
91*	2098	Upper-Lower	Comprehensive
96	246	Lower-Lower	Mentally Retarded
106*	400	Lower-Lower	Comprehensive
115	248	Lower-Lower	Mentally Retarded
130	2019	Upper-Lower	Comprehensive
176	334	Lower-Lower	Mentally Retarded
180	1232	Lower-Lower	Comprehensive
181	1147	Upper-Lower	Comprehensive
182	215	Lower-Lower	Mentally Retarded
222*	2420	Middle	Comprehensive
230	996	Upper-Lower	Comprehensive
233	1016	Middle	Comprehensive
239*	1098	Upper-Lower	Comprehensive
294*	121	Lower-Lower	General Vocational
296	109	Lower-Lower	Comprehensive
298	528	Lower-Lower	Comprehensive
301	57	Upper-Lower	Comprehensive
451	226	Lower-Lower	Mentally Retarded
452	387	Lower-Lower	Comprehensive
453*	1154	Lower-Lower	General Vocational

* Denotes a school which was included in the sample.

APPENDIX IV

ITEM TO ITEM AND ITEM TO TOTAL CORRELATION COEFFICIENTS FOR THE RULES SCALE

 $N = 25$ [illegible]

N = 93

192

ITEM TO ITEM AND ITEM TO TOTAL CORRELATION COEFFICIENTS
FOR THE IMPERSONALITY SCALE

N = 103

[illegible]

[illegible]

ITEM TO ITEM AND ITEM TO TOTAL CORRELATION COEFFICIENTS
FOR THE COMMITMENT SCALE

N = 145

Question	Question					Total
	6	7	10a	10b	4	
6						
7	0.838					0.732
10a	0.396	0.101	0.084	0.068	0.082	0.761
10b	0.394	0.137	0.126	0.085	0.108	0.456
2		-0.035	0.132	-0.113	0.081	0.295
3			0.075	0.064	-0.143	0.470
4			0.297	0.061	0.054	0.391
						0.393

APPENDIX V

Scales and Indices

The following scales and indices were constructed from the questionnaire items:

Index of Bureaucratically Defined
Teacher Competence

Item:

8. Are you

- 1) Elected
- 2) Not Elected
- 3) Special Substitute
- 4) Student Teacher
- 5) Other (specify) _____

Index of Bureaucratically Perceived
Teacher Commitment

Items:

6. Indicate the total number of years that you will have been teaching by the end of the present year.

- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) Five
- 6) Over Five

Code: Code responses 1 to 4 as numbered.
Code responses 5 and 6 as 5.

7. Indicate the number of years that you will have been teaching at the present school by the end of the current year.

- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) Five
- 6) Over Five

Code: Code responses 1 to 4 as numbered.
Code responses 5 and 6 as 5.

Index of Authority Conflict

Items:

5. Indicate your satisfaction with the following aspects of your school:

	<u>Satisfied</u>	<u>Usually Satisfied</u>	<u>Dis-satisfied</u>
Administrative Backing for Teachers	1	2	3
Administrative Recognition of Teachers	1	2	3
Class Assignments for Teachers	1	2	3
Transfer of Teachers upon Request	1	2	3
Faculty Dining Room Provisions	1	2	3
Faculty Room Provisions	1	2	3
Other (specify)			

Code: Code 1 if response 1 is specified on the first 4 items.
 Code 2 if response 2 is specified on at least 1 of the first 4 items.
 Code 3 if response 2 or 3 is specified on 2 or more items.

7. Do you feel that teachers should bargain collectively for wages, fringe benefits, class size, duties, etc.?

- 1) No
- 2) Undecided
- 3) Yes

Code: Code responses as numbered.

8. Do you feel that teachers should belong to a union so that their views may be made known to the administration?

- 1) No
- 2) Undecided
- 3) Yes

Code: Code responses as numbered.

9. Do you feel that a definite procedure should be established so that teachers with complaints may discuss them with administrative officials of the school and the school district?

- 1) Not necessary
- 2) Undecided
- 3) Necessary
- 4) Such a procedure already exists

Code: Code responses 1 to 3 as numbered.
Omit if response 4 is indicated.

Index of Impersonality in Teacher-Student Relations

Items:

16. In using textbooks for your classes, do you

- 1) Assign outside readings in the library on the topic that you are discussing
- 2) Make several different texts or books available for student use in your class
- 3) From time to time supplement the textbook that you are using with additional readings from other books
- 4) Use different textbooks for sections of the same subject based on their ability
- 5) Use the same textbook for all sections of the same subject
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

17. Do you hold conferences after school with students to help them with problems and with their academic work?

- 1) Yes, whenever I feel that the student needs help
- 2) Yes, I encourage them to come after school several days a week.
- 3) Yes, whenever students request help
- 4) Yes, when tutoring sessions are scheduled
- 5) No, not unless I feel that it is absolutely necessary
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

20. Indicate the extent to which you consider the following factors in assigning a grade to a student in your class.

	<u>Consi- dered</u>	<u>Considered Borderline Case</u>	<u>A Partial Factor</u>	<u>One of the Major Factors</u>	<u>The Major Factor</u>
His achievement compared to his ability	1	2	3	4	5

Code: Code responses 1 to 5 in reverse order (1 as 5, 2 as 4, etc.).

20. Indicate the extent to which you consider the following factors in assigning a grade to a student in your class.

	<u>Consi- dered</u>	<u>Considered Borderline Case</u>	<u>A Partial Factor</u>	<u>One of the Major Factors</u>	<u>The Major Factor</u>
Home problems	1	2	3	4	5
Emotional Problems	1	2	3	4	5
Physical Disability	1	2	3	4	5
Work after School	1	2	3	4	5
Participation in Extracurricular Activities	1	2	3	4	5

Code: Code responses 1 to 5 for each item in reverse order (1 as 5, 2 as 4, etc.). Average the responses to the five items after coding.

Index of Goal Displacement

Items:

22. Indicate how often during the semester you use the following techniques in teaching:

	<u>Not at All</u>	<u>Several Times a Semester</u>	<u>Several Times a Month</u>	<u>Several Times a Week</u>
Experiment	1	2	3	4
Student Reports	1	2	3	4
Field Trips	1	2	3	4

	<u>Not at All</u>	<u>Several Times a Semester</u>	<u>Several Times a Month</u>	<u>Several Times a Week</u>
Field trips	1	2	3	4
Student Projects	1	2	3	4
Team Competition	1	2	3	4
Reading in Class	1	2	3	4
Individual Library Work	1	2	3	4

Code: Code responses 3 and 4 as 3. Reverse order in coding (1 as 3, 2 as 2, and 3 as 1). Average the responses to the 7 items after coding.

23. If you teach one of the following subjects, indicate whether or not you would be in favor of adopting the Chemical Bond or Chem Study Program, BSCS Biology, or PSCS Physics, in your department.

- 1) In favor of adoption
- 2) Undecided
- 3) Not in favor of adoption
- 4) Already in use in my school

Code: Code responses 1 to 3 as numbered.
Omit if response 4 is specified.

24. If you teach English, indicate whether or not you would be in favor of adopting a Creative Writing Program and Structural Linguistics in your department.

- 1) In favor of adoption
- 2) Undecided
- 3) Not in favor of adoption
- 4) Already in use in my school

Code: Code responses 1 to 3 as numbered.
Omit if response 4 is specified.

25. If you teach Industrial Arts, indicate whether or not you would be in favor of adopting programs of Horticulture and Cosmetology in your department.

- 1) Yes
- 2) Undecided
- 3) No

Code: Code responses as numbered.

26. Are you in favor of using teaching machines as an aid if programs are available for your subject?

- 1) Yes
- 2) Undecided
- 3) No

Code: Code responses as numbered

27. Are you in favor of participating in team teaching if given the opportunity to do so?

- 1) Yes
- 2) Undecided
- 3) No

Code: Code responses as numbered.

28. Are you in favor of using educational television as an aid to your teaching?

- 1) Yes
- 2) Undecided
- 3) No

Code: Code responses as numbered.

29. Are you in favor of adopting a merit pay plan for teachers?

- 1) Yes
- 2) Undecided
- 3) No

Code: Code responses as numbered.

Departmental Rules Scale

Items:

3. Check the procedure regarding the preparation of Lesson Plans which is most applicable to your department.

- 1) The individual teacher may or may not prepare an informal or formal lesson plan as he sees fit. However, one lesson plan is to be available for use by a substitute teacher.

- 2) The teacher is to prepare a lesson plan which may be inspected upon occasion by the department chairman, supervisor, or principal.
- 3) The teacher is to prepare a lesson plan according to a certain prescribed format and to have them available for inspection upon request.
- 4) The teacher is expected to have a copy of his current lesson plan in a folder in his desk or in the departmental office at all times.
- 5) The teacher is to have copies of his lesson plan for several days or a week ahead of time in his desk or in the departmental office at all times.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

4. Check the procedure regarding Curriculum which is most applicable to your department.

- 1) The individual teacher decides what is to be included in the curriculum for the classes he teaches.
- 2) There is a general curriculum guide for the subject and grade, but the teacher may select those topics that he wishes to emphasize in any order that he prefers.
- 3) There is a general curriculum guide for the subject and grade which the teacher must follow, but he may develop each topic as he wishes.
- 4) There is a general curriculum guide for each subject and grade, in which each topic is sub-divided into general lessons which the teacher is expected to follow.
- 5) There is a general curriculum guide for the subject and grade, topics are sub-divided into general lesson plans, and teaching methods, projects, and assignments are outlined, which the teacher is expected to follow.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

5. Check the procedure regarding the Selection of Textbooks for a class which is most applicable to your department.

- 1) The individual teacher may select any text which he feels is suitable for his class.

- 2) The teacher may select the textbook which he feels is best for his classes from several texts preselected by the administration, department chairman, etc.
- 3) The teacher may select the textbook which he feels is best for his class from several texts preselected by the administration, department chairman, etc., but must secure approval from his department chairman, or supervisor for his selection.
- 4) The teacher is assigned a textbook for his classes, but may supplement this textbook with others if he wishes.
- 5) The teacher is assigned a textbook for his classes which he is to use.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

6. Check the procedure regarding the discussion of Controversial Topics (e.g., nuclear testing, politics, religion, sex, evolution, etc.) which is most applicable to your department.

- 1) The individual teacher is the judge of whether or not a controversial topic is to be discussed in class and may state his own opinion concerning the subject.
- 2) The individual teacher is the judge of whether or not a controversial topic is to be discussed in class, but is to remain neutral and is not to state his own opinion.
- 3) Controversial topics are to be discussed in class, but the teacher is to follow a definite procedure in handling the discussion.
- 4) Controversial topics may be discussed in class but the teacher is expected to secure approval from his department chairman first.
- 5) Controversial topics may be discussed in class only if they are included in the curriculum guide.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

7. Check the procedure regarding the Grading of Students which is most applicable to your department.

- 1) The individual teacher may grade his students according to any standard that he wishes.
- 2) There is to be a general standard used by teachers in grading students (e.g., A grade is to be based 50% on test scores, 20% on homework, 20% on assignments, and 10% on teacher evaluation of effort.).

- 3) There is a definite policy about how low a grade a teacher may give, passing or failing of students, distribution of grades, etc.
- 4) Teachers are expected to assign grades to students, which are then reviewed by the counselor, department chairman, or principal who may ask the teacher to justify certain grades.
- 5) Teachers are expected to assign grades to students which are then reviewed by the counselor, department chairman, or principal who may change the grades if they are too low or if there are mitigating circumstances.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

8. Check the procedure regarding Work Assignments for Students which is most applicable to your department.

- 1) Teachers may make any assignment that they wish in their classes.
- 2) Teachers may make any assignment that they wish to students, but the length of time required to complete the assignment must not exceed a certain limit.
- 3) There are general types of assignments which the teacher may choose from for his students.
- 4) Before a student project or library research projects are assigned, the teacher is to secure approval from his department chairman or supervisor.
- 5) There is a detailed list of assignments that the teacher may make to students.
- 6) Other (specify) _____

Code: Code responses 1 to 5 as numbered.
If response 6 is specified, code 1 to 5.

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